RTT-D Guidance:
Implementing Performance Metrics for Continuous Improvement that Support the Foundational Conditions for Personalized Learning

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By Jessica Johnson, Kimberly Kendziora, and David Osher
1000 Thomas Jefferson St., NW
Washington, DC 20007
800-356-2735 • 202-403-5000
www.air.org

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This paper is a companion piece to the “Race to the Top-District Action Brief: Establishing a Foundational Conditions for Personalized Learning” by Turnaround for Children. For more information on that paper, please contact Michael Gross, Vice President of Partnership Development, Turnaround for Children, mgross@tfcusa.org.
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PURPOSE

The Race to the Top—District (RTT-D) competition asks districts to personalize education for all students in their schools, focusing on classrooms and the relationship between educators and students. To reach this bold goal, the competition calls for providing teachers with “the information, tools, and supports that enable them to meet the needs of each student and substantially accelerate and deepen each student’s learning.” Local education agencies must “have the policies, systems, infrastructure, capacity, and culture to enable teachers, teacher teams, and school leaders to continuously focus on improving individual student achievement and closing achievement gaps.” In addition, the RTT-D competition requires that applicants identify 12 to 14 “ambitious yet achievable” performance measures, as well as a process for how the measures will provide rigorous, timely, and formative information and how the applicant will review and improve the measures over time if they are insufficient to support and gauge implementation progress.

The anchoring system for this work is a continuous improvement process and a set of performance measures that drills down to the learner and classroom, focuses on the relationship between educators and students, and helps teachers, teacher teams, and school leaders to continuously focus on improving individual student achievement and closing achievement gaps. Section E of the RTT-D Notice Inviting Applications (NIA) requires that districts have a continuous improvement process that includes ongoing communication and engagement and a set of performance measures. The proposed continuous improvement process and measures support three conditions necessary for successful implementation of personalized learning: (1) effective learning environments, (2) effective student support, and (3) organizational efficacy.

CONNECTION TO FOUNDATIONAL CONDITIONS FOR PERSONALIZED LEARNING

The RTT-D competition presents an important opportunity for leading school districts to design and implement continuous improvement processes that support personalized models of teaching and learning that can deepen and accelerate college and career readiness for all students. Doing this requires metrics that are relevant to the goals of turnaround and personalization, neither of which is a simple process. For example, a federally commissioned review of school turnaround (Herman et al., 2008) found little rigorous research evidence identifying approaches to school turnaround that reliably produce gains in student achievement. This may reflect a lack of research or may suggest that there is no one approach that is effective in all circumstances. If the latter is true, locally developed processes that may adapt and apply established models may be more appropriate and effective. More recent exploratory research suggests that successful turnaround was characterized by the interplay of school implementation with district policies and support (Sparks, 2012) and another study reported that “all of the case study schools that raised achievement enough to exit restructuring used multiple, coordinated strategies, which they revised over time” (Center for Education Policy, 2009, p. 1).

To be able to successfully implement a personalization of learning strategy successfully, we recommend the following foundational strategies as outlined in the companion paper produced by Turnaround for Children:
• **Teacher Practice: Build Highly Effective Classroom Learning Environments.** Teachers must be trained both to confront recurring challenges and barriers and to effectively build those attributes that students must have for deeper learning, and college and career readiness. This means that teachers must become proficient in pro-social classroom management and in high-leverage instructional strategies.

• **Student Support: Develop a Rigorous Capacity for Student Support.** Schools must establish a multi-tiered high capacity, high quality student support system that includes school-wide, classroom and individual supports for students at all levels of risk and need. This system must include school-wide positive discipline, social and emotional learning and classroom-level and individualized student support.

• **Leadership and Management: Establish the Organizational Efficacy to Implement Personalized Learning Environments.** A multi-disciplinary school leadership team (SLT) must be established to develop and execute a school improvement plan (SIP), including putting in place all three foundational conditions as the first step in a comprehensive approach to the personalization of learning. The SLT should monitor progress and review leading indicators, outcome data, measures of conditions for learning and measures that assess quality of implementation.

There is research to suggest not only that these elements are critical but also that including measures related specifically to student support is critical for the success of the reform. In the remainder of this report, we describe a continuous improvement strategy and a rigorous application of performance measures at the district, school, classroom, and student levels.

**AN APPROACH TO CONTINUOUS IMPROVEMENT THAT BUILDS THE CONDITIONS FOR LEARNING, PERSONALIZATION, AND ACHIEVEMENT FOR ALL STUDENTS**

In this section, we first describe the critical elements of the continuous improvement process. Next, we outline the roles played at the district, school, classroom, and student levels. Finally, we discuss how to involve parents and other community stakeholders in the continuous improvement process.

**Critical Elements of the Continuous Improvement Process**

Continuous improvement is a term used to describe the improvement life cycle in which district and school staff, along with community stakeholders, (1) collect and analyze data, (2) set measurable and achievable goals, (3) plan for improvement using various strategies, resources, and actions, (4) implement benchmarks and deliverables, and (5) evaluate progress and modify practice if necessary. Although continuous improvement models typically follow this sequential approach over the course of a school year, for personalization to be effective, the approach must not be considered linear because activities often happen in parallel. It is carried out at multiple levels—district, school, classroom, and student. Further, the process includes assigning staff and stakeholders to accomplish specific tasks, establishing timelines, and allocating necessary resources. The process is “owned” by everyone in the district, schools, and community. This process anchors the establishment of personalized learning for all students and must be as follows:
• **Highly iterative with daily feedback loops at the classroom and student levels.** Since what happens in the classroom has the greatest effect on student achievement, intense focus on understanding data and modifying approaches (instructional and others) is critical at this level. This daily focus is important to prevent students from experiencing unnecessarily high levels of frustration and to enable students to accelerate deeper learning.

• **Fluid and flexible to address that some indicators are likely to lead change, while other indicators are more likely to follow improvements on these leading indicators.** Leading indicators are those individual and environmental factors that, although they can change relatively quickly, are predictors of or conditions for longer term change. These are strategic outputs (e.g., targeted professional development), individual competencies (e.g., improvements in the abilities of students and teachers to manage the learning process) individual behaviors (e.g., attendance), and improvements in the conditions for learning (e.g., physical and emotional safety).

• **Engaging of a broad group of stakeholders to participate in the development and monitoring of district and school plans that focus on 3 to 5 objectives.** Although many schools typically engage in a school improvement planning process, they do not often include a broad stakeholder base. Stakeholder engagement and attention to supporting the participation of diverse stakeholders are critical. At the middle and secondary levels, we recommend that in addition to administrators, teachers, school partners, and parents, students are included in the stakeholder team that co-interprets data and generates action plans. In each case, plan development should include the resources required for effective implementation, the parties responsible, timelines, and proposed measures and benchmarks. Because resources are scarce, all efforts should be focused on a set of three to five key objectives for a given school year. Stakeholders should be convened twice annually for a “reality check,” where they look closely at the data, assess progress, and recommend midcourse corrections as needed. The term “reality check” highlights the sometimes difficult conversations and decisions that must take place. The school cannot wait until the end of the school year to make changes if the data warrant change. Progress reports should be provided to the school board quarterly, with accompanying materials (e.g., press releases, newsletters) to notify the broader community of the progress.
Roles in the Continuous Improvement Process

DISTRICT

District and school staff, as well as the stakeholders identified earlier, all play key roles in the process. The district is responsible for setting the overall direction and goals for the district. Transparency is critical in this process.

District

- Conducts annual needs assessment and publicly shares results along with district measures and benchmarks
- Involves parents in the reform and accountability process for student performance
- Sets annual academic, climate, and social emotional learning targets
- Convenes school stakeholder committee twice annually to assess progress and to recommend changes
- Establishes systems for identification and support of students with higher levels of need, internally and with community support agencies

SCHOOL

At the school level, it is critical that a school leadership team (SLT)\(^1\) is structured and given authority to carry out the reform. The continuous improvement process and associated reform plan are the backbone for this work. For effective reform, the school leadership team that includes teacher leaders should be created and convened at a minimum every other week, with clear roles and authority. This SLT is responsible for doing the work, monitoring progress, and making midcourse corrections as needed. Measures must include leading indicators, outcomes data, measures of the conditions for learning, and measures to assess quality (and where relevant, timeliness) of implementation, as outlined in the next section. Data should be disaggregated so that monitoring and planning can look at results by subgroups.

In addition to a highly effective school leadership team, a student support team (SST)\(^2\) is needed to focus on the provision of services to students with higher levels of academic or social and emotional learning (SEL) needs. Implementation of an early warning signs protocol is a critical component for this team (see www.betterhighschools.org). The SST meets weekly to develop and monitor plans for high-need students, identified through the early warning signs protocol. (Information on team composition and dynamics can be found in chapter 1 of Osher, Dwyer, & Jackson [2004].)

Finally, providing supports for teachers through access to data, tools, time to plan and use data, and professional development are essential. These activities should be identified in the plan and then executed with both district and school resources.

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\(^1\) To learn more about the SLT, see page 17 of the companion paper to this piece, titled “Race to the Top-District Action Brief: Establishing a Foundational Conditions for Personalized Learning” by Turnaround for Children.

\(^2\) To learn more about the SST, see page 15 of the “Race to the Top-District Action Brief” companion paper to this piece.
At the classroom level, teachers are responsible for implementing the strategies and tools they acquire through the reform process. From a continuous improvement perspective, they should monitor student engagement and learning on a daily basis. Given the demands on teachers, this is perhaps the most challenging yet most critical component to continuous improvement. This monitoring includes:

- reviewing predictive data (individual attendance, behavior),
- formative data on academic performance (formative assessments), and
- outcome data (achievement scores).

To make this process continuous, educators should refine practices when warranted, again measuring outcomes and looking for places for further refinement. This process must be supported. For example, the national Study of Education Data Systems and Decision Making (Means, Padilla, DeBarger, & Bakia, 2009) found that despite progress in giving teachers access to student data, neither the type of assessments for which data are available nor the time frame of assessment activities serves the needs of classroom teachers making decisions on a daily basis. Structures that effectively supported data use at the school level included:

- designated time for teachers to review and discuss data in small groups,
- assigned support staff to help teachers interpret data, and
- the adoption of procedures for discussing data.
STUDENT

Finally, students and families must engage in the continuous improvement process. Goal setting should be a part of student engagement in learning, and teachers should support students in self-monitoring progress, which includes awareness of where they are going, how they are doing, and where are they going next (Hattie, 2008). This information can, if desired, be part of individual growth plans for every student. Families can be engaged through family-driven strategies that employ a variety of strategies, such as student-led conferences, curriculum nights, and skill-building courses for parents.

Engaging Stakeholders in Continuous Improvement

Stakeholders must be engaged at all levels—district, school, classroom, and student. Groups of stakeholders participate in various stages of the continuous improvement process. Identifying them up front and determining an engagement strategy with each group is critical. For example, a core set of staff, partners, parents, and community members should be identified as a stakeholder group for each school and one for the district at large. These groups participate in planning, in midpoint reality checks, and in carrying out pieces of the work. The broader school community of all families, staff, and students should be engaged at the front end through the needs assessment process and should receive frequent, clear communications regarding the objectives and progress toward the plan. Stakeholder engagement should include the following:

Classroom
- Implement high-leverage instructional and classroom management strategies that support academic and social emotional learning (SEL), the connections between and among students and teachers, and personalization
- Assess student progress daily; meet with colleagues weekly in a professional learning community to review student data and to modify practice
- Participate in formal and informal classroom observations monthly

Student
- Set course-level performance goals based on rubrics for mastery
- Partner with teacher to develop an individualized plan for college/career readiness

3 To learn more about involving students in formative assessments and setting their own goals, see page 11 of the “Race to the Top-District Action Brief” companion paper to this piece.
• **An annual needs assessment is an effective mechanism for gathering and reflecting on broad stakeholder input.** Many districts have some structure in place already to gather data to complete a required state-level improvement plan. However, the collection of qualitative data and the engagement of a broad stakeholder group are often overlooked in this process. Further, the sophistication of analysis of the data needs to include disaggregation by subgroups, analysis of trends over time, and triangulation across data sources to identify patterns in the current needs and strengths.

• **A multichannel communication plan will increase understanding and generate public will and support for the reform.** The goals determined by the stakeholder groups should be communicated to the entire community through a variety of channels: school assemblies, parent meetings, the district website, Facebook, outreach to local religious communities, newspaper articles, newsletters, and other community forums. The improvement strategy and associated measures and benchmarks should also be widely known in the community.

• **District identification of community supports and partnerships reinforces achievement and SEL goals.** These supports and partnerships include community-based mental health providers, local children’s services agencies, afterschool programs, and other partnerships that benefit academic or social emotional growth.

**APPROACH TO PERFORMANCE METRICS**

The purpose of performance metrics is to determine success in meeting academic and social-emotional learning (SEL) goals. **This section of the report connects evidence-based research to practices districts can use in their RTT-D applications and provides guidance regarding outcome measures.** The performance measurement framework as set forth in the RTT-D NIA requires districts to establish a set of 12 to 14 performance measures (see section E3 in the RTT-D NIA). To be effective, the set of measures must include the following:
Key Considerations in Selecting Performance Metrics

- **Cognitive and noncognitive measures.** Academic measures generally refer to performance on a benchmark or diagnostic test. “Noncognitive measures” may be less familiar to educators, but these measures have been firmly established in determining school and career outcomes (Borghans, Duckworth, Heckman, & Weel, 2008; Heckman, & Rubinstein, 2001; Heckman, Stixrud, & Urzua, 2006) and have been shown to be related to attendance, discipline, dropout, and achievement (Cornell, Gregory, & Huang, in press; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Osher, Bear, Sprague, & Doyle, 2010; Osher & Kendziora, 2010).

- **“Quick win” indicators.** Quick wins have been cited as important for generating buy-in and moving towards full implementation (Herman et al., 2008). Quick wins should be successes that strategically move the reform plan forward, (e.g., classroom rules or norms in place), rather than truly short-term outcomes (moving “bubble” students to proficiency). These ideally occur within the first 30 days of implementation, but they can have utility as far as 90 to 180 days into implementation.

- **Leading and progress indicators to predict future outcomes and track ongoing process.** Leading indicators serve as early signals of progress toward academic improvement and achievement. They can help leaders make “more strategic and less reactive decisions about services and supports to improve student learning” (Foley et. al, 2008, p.2) They include formative and benchmark assessment data on the academic side as well as attendance, discipline, and other measures of teacher and student engagement on the noncognitive side. Progress indicators are used to track ongoing execution and results in terms of implementation as well as implementation impact.

- **Focus on quality measure for ongoing performance excellence.** Often districts and schools fall into the trap of implementing reforms at a low to moderate level of quality, which will be insufficient to change outcomes significantly. For example, professional learning communities (PLCs) may be in place, but the conversations within them are not rich, and teacher growth is not taking place at the expected levels. Quality measures are intended to dig deep into the implementation and assess quality. They include observations, surveys, and other specific data about what is happening in the school.

PROPOSED PERFORMANCE METRICS

The following sections include rationale and suggested metrics for key measures regarding teacher and leader performance as well as student engagement and progress, and the “noncognitive” measures such as the conditions for learning.

**Measures of Effective Teachers**

**Rationale.** The RTT-D application asks districts to measure teacher and leader effectiveness with a specific metric (see the Proposed Performance Metrics table), which asks how many students have access to teachers that show gains of one or more years of learning for their students (effective = 1 year, highly effective = 1.5 or more years).
One of the most powerful school variables affecting student achievement is teacher quality (Darling-Hammond, 2000). Research on “value-added” assessments of student achievement indicates that (1) minority and low-income students are disproportionately taught by under-qualified school teachers, and (2) economically disadvantaged students who have effective teachers for consecutive years are able to close the achievement gap between disadvantaged and non-disadvantaged students. Nye, Konstantopoulos, and Hedges (2004) used Tennessee value-added data to show that low-income students were more likely to benefit from instruction by a highly effective teacher (defined as a teacher whose average student score gain is in the top 25 percent) than were their more advantaged peers. In addition, Sanders and Rivers (1996) reported that the achievement gains from having a highly effective teacher could be almost three times as large for African American students as for white students, even when comparing students who started with similar achievement levels.

**Student Surveys as a Measure of Teaching**

Information from student surveys can provide useful insights into a teacher’s effectiveness as well as regarding the conditions for learning, which are described later in this paper. Student feedback can be used for non-tested grades and subjects, and when subscales are reliable, the feedback can be specific and actionable. In the Measures of Effective Teaching (MET) project, student feedback using the Tripod survey (Cambridge Education, 2012) was a better predictor of a teacher’s performance than more traditional indicators of success such as whether a teacher had a master’s degree or not (Bill & Melinda Gates Foundation, 2010). According to a MET study report, when a teacher teaches multiple classes, student perceptions of his or her practice are remarkably consistent across different groups of students. The most predictive aspects of student perceptions were related to a teacher’s ability to control a classroom and to challenge students with rigorous work (Bill & Melinda Gates Foundation, 2010).

**Proposed Teacher Effectiveness Metrics**

Historically, teacher performance has been measured through an annual (or semiannual) classroom observation. Although RTT-D demands that student growth be included in teacher evaluation, it is critical to note that the review of teacher performance, in a non-punitive way, must occur much more frequently than annually or semiannually. Consistent with recommendations from the Bill & Melinda Gates Foundations’ Measures of Effective Teaching project (2010, 2012), we propose classroom observations (e.g., using the CLASS instrument), student surveys (for example, the Tripod survey), and instructional coaching and teacher reflection through professional learning communities (PLCs) as three possible measures to use on a regular basis.

**Measures of Effective Leaders**

**Rationale.** For principals, performance is typically measured on an annual basis. Based on the school plan, the principal should be held accountable for school metrics on a quarterly basis at minimum. At the launch of the new reform, the principal should be held accountable for a “quick win”—something that will signal a change in school culture and expectations right from the start. Several good examples exist in the turnaround space, such as parent/student outreach, changes to physical space, or increase in attendance for the first 10 days of school. 30-, 60-, 90-, and 180-day implementation plans and benchmarks are good tools to monitor principal performance. Specific indicators must include measures of teacher and student performance schoolwide.
Measures of Student Academic Engagement and Progress

Student academic indicators measure factors that contribute to academic success. These include attendance, grade retention, course promotion, academic progress, and access to rigorous course work. In this section, we discuss the rationale for each of these factors as well as describe how they can be measured.

School Attendance

**Rationale.** Attendance appears on many district report cards because (1) many schools measure it carefully, particularly if they have per-student funding, (2) attendance is often used as a proxy for student (and family) engagement in schooling, and (3) attendance is a robust predictor of high school dropout (Epstein & Sheldon, 2002; Finn, 1989; Lehr, Sinclair, & Christenson, 2004). Research suggests that missing more than 10 percent of instructional time is cause for concern (Allensworth & Easton, 2007). This percentage translates to roughly two weeks (9–10 days) of school per semester in most schools.

Attendance is important from the primary grades onward. Research suggests that the combination of excused and unexcused absences in elementary school predicts subsequent academic outcomes (Chang & Romero, 2008; Connolly & Olsen, 2012). In a sample of students from a large urban district, elementary attendance for students who later graduated averaged 94.7 percent, whereas those who later dropped out averaged 91.9 percent (Spier, Goosby, & Kendziora, 2005). Eighth-grade attendance strongly predicts retention in the ninth grade (Neild & Balfanz, 2006), which in turn predicts dropout (Rumberger, 1995). Low attendance during the first 30 days of ninth grade was found to be a more powerful predictor of dropout than eighth-grade test scores, academic achievement, or age (Jerald, 2006). During the course of high school, attendance continues to be significantly associated with the likelihood that a student will graduate (Allensworth & Easton, 2005).

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Proposed Principal Effectiveness Indicators

- **School rules and procedures** are posted and enforced with consistency (administrator walk-through)
- **Student learning objectives** (SLOs) are defined, shared, and measured weekly (teacher report)
- Teachers are trained on **professional learning community** (PLC) structure and meeting weekly
- **Early warning system** (EWS) data collection is in place
- **Student support team** (SST) is established
- **School goals** are transparent and shared broadly
- **School leadership team** (SLT) established, meets regularly with minutes and actions
- **Positive behavioral expectations plan** in place
- **Classroom observations** are a routine part of the administrator’s schedule
grade retention has been widely regarded as a powerful predictor of dropping out of high school (Jimerson, Ferguson, Whipple, Anderson, & Dalton, 2002; Rumberger, 1987, 1995). Repeating a grade between first and eighth grades was found to be a significant risk factor for dropping out of high school, even after controlling for demographic characteristics that are generally correlated with school failure (Janosz, LeBlanc, Boulerice, & Tremblay, 1997; Jimerson, Ferguson, Whipple, Anderson, & Dalton, 2002). West (2012) reported results of a rigorous study of grade retention in Florida that showed that students who were retained in third grade and provided with intensive remediation performed at higher levels than their promoted peers in both reading and mathematics, but these effects faded by Grade 7. In addition, students who were overage for their grade in middle school for any reason had a higher likelihood of dropping out of high school (Jerald, 2006). Exclusionary discipline as well as academic underachievement appear to predict grade retention (Fabelo et al., 2011) as does the failure to address issues of credit accumulation for disconnected youth (Osher, Amos, & Gonsoulin, 2012).

Proposed Grade Retention Metric

Like attendance, grade retention must be monitored on a student-by-student basis. Any student who has ever been retained should be flagged to ensure that appropriate remediation supports are delivered and later credit accrual is timely. In addition, attention should be paid to the credit accumulation of disconnected youth and students with chronic health problems.

Course Performance

Rationale. Course performance both predicts college completion (via grade point average [GPA]; Bowing, Chingas, & McPherson, 2009) and high school dropout. Students who have grades of C or lower throughout middle school have increased odds of dropping out of high school, even after demographic variables generally associated with school failure are controlled for (Horn & Chen, 1998). By the end of the first semester of high school, course grades and failure rates are slightly better than attendance as predictors of whether students will graduate (Allensworth & Easton, 2007). Students with a GPA of 2.0 or less at the end of their first year of high school should be considered at risk for dropping out.
Research from Chicago indicates that students who fail one or more courses in the fall semester of their first year of high school are less likely to graduate than students who do not. In Chicago Public Schools, 85 percent of students with zero semester course failures in their freshman year graduated four years later, but only 70 percent of students with one semester F and only 55 percent of students with two semester F’s graduated in four years. Students with three or more semester F’s are not likely to graduate high school (Allensworth & Easton, 2007). Research such as this suggests that students with one or more F’s in any course should be flagged for possible intervention.

### Proposed Course Performance-Credit Accrual Early Warning System

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<thead>
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<th>#Semesters With F’s in Core Courses</th>
<th>Accumulated Number of Credits Required for Promotion?</th>
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<tbody>
<tr>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>2 or more semesters</td>
<td>Off track</td>
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<tr>
<td>0 or 1 semester</td>
<td>Off track</td>
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<td>On track</td>
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### Rigorous Coursework

**Rationale.** A critical factor determining whether a student enters and completes college is participation in a strong academic curriculum in high school (Adelman, 2006). The completion of a rigorous high school curriculum was more strongly correlated with completing college than high school test scores, GPAs, or race. In addition, an intensive academic curriculum in high school had the strongest positive effect for African American and Latino students. Students who enroll in higher level, more challenging course work in middle school are more likely to be successful in both high school and to attend college (Bridgeman & Wendler, 2005).

Within the mathematics domain, there is a well-known relationship between completing Algebra I in the eighth grade and attending a four-year college (Atanda, 1999; Pelavin & Kane, 1990). A U.S. Department of Education report revealed that 83 percent of students who completed both Algebra I and geometry began college within two years of high school graduation, compared with only 36 percent of students who had not taken the two courses. In addition, Algebra I seems to act as an “equalizer” across socioeconomic classes. Seventy-one percent of low-income students who completed both Algebra I and geometry went on to college, compared with only 27 percent of those who had not taken these classes (U.S. Department of Education, 1997). The difference in college attendance rates between students of different income levels is greatly reduced when low-income students take Algebra I and geometry, although the disparity does not completely disappear.

American Institutes for Research (AIR) has developed a somewhat complex but predictive College Eligibility Index (Bohrnstedt, Kendziora, Brown, Windham, & Dymnicki, 2012; see the Appendix) that examines both course-taking and grades obtained in high school English, mathematics, science, social studies, and foreign language. This index is based on research showing that students who completed four years of mathematics, science, and English in high school were more likely to graduate from college (Bowing et al., 2011; Kuh, Kinzie, Buckley, Bridges, & Hayek., 2006). Research also suggests that one indicator of educational adequacy is taking high school courses in a foreign language, particularly at the AP level (Rothstein, 2000). Similarly, completing higher-level mathematics courses such as Algebra II, trigonometry, or calculus were very strong predictors of high academic achievement in college (Adelman, 2006). AIR’s index has been piloted with the 2004,
2005, and 2006 freshman cohorts in Syracuse, New York, and early results have shown the following:

- Students who were “on track to thrive” (likely to achieve desired “middle class” outcomes for college, career, and citizenship) were the most likely to enroll in college (81.9 percent) when compared with students who were “on track to graduate” (65.5 percent) or “off track” (24.2 percent).
- Of students who enrolled in college, a higher percentage of students who were “on track to thrive” enrolled in a more selective four-year college (60.0 percent) when compared with students who were “on track” (14.2 percent) or “off track” (3.6 percent).

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<td><strong>English course-taking/grades</strong></td>
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<td><strong>Mathematics course-taking/grades</strong></td>
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<tr>
<td><strong>Mathematics courses</strong></td>
</tr>
<tr>
<td><strong>Science course-taking/grades</strong></td>
</tr>
<tr>
<td><strong>Social studies course-taking/grades</strong></td>
</tr>
<tr>
<td><strong>Foreign language course-taking/grades</strong></td>
</tr>
<tr>
<td><strong>High school GPA</strong></td>
</tr>
</tbody>
</table>

The full College Eligibility Index is presented in the Appendix.
Noncognitive Indicators

There are four sets of noncognitive factors that affect personalization and learning:

1. Conditions for learning
2. Schools approach to discipline and how it affects students
3. Student social-emotional competencies, which, although they have cognitive components, are often described as being noncognitive
4. Student health—behavioral and physical

We describe each in the following sections.

Conditions for Learning

Rationale. “Conditions for learning” refer to those aspects of school climate that are proximally related to learning and development. These conditions can be facilitated by student support, positive behavioral approaches, robust curricula, strong and culturally responsive pedagogy, and support for social and emotional learning (Osher, Dwyer, Jimerson, & Brown, 2012; Osterman, 2000; Ryan & Patrick, 2001; Thuen & Bru, 2009).

A National Research Council report (Bowman, Donovan, & Burns, 2001) pointed out that “one of the most consistent findings in the early childhood literature is that an emotionally warm and positive approach in learning situations leads to constructive behavior in children” (p. 52). Pianta and his colleagues (2008) have shown that better emotional quality of classroom interactions positively predicts growth in reading and mathematics achievement from first through fifth grade. Starting early is very important, but across all years of schooling, enhancing social and emotional behaviors can have a strong impact on success in school and ultimately in life (Zins, Bloodworth, Weissberg, & Walberg, 2004).

The literature concerning climate and conditions for learning shows an association between school climate and academic achievement (e.g., Klem & Connell, 2004; Osher & Kendziora, 2010; Osher, Spier, Kendziora, & Cai, 2009). In addition, researchers have shown that regardless of the level of school climate, improving school climate is associated with increases in student performance in reading, writing, and mathematics (Osher et al., 2009).
Proposed Conditions for Learning Metrics

The Safe and Supportive Schools Technical Assistance Center maintains an online compendium of school climate measures on its website. The list includes student, staff, and family surveys that can be used as part of a school climate needs assessment. Vetted surveys (and the target audience that completes them) are as follows:

- American Institutes for Research Conditions for Learning Survey (student report)
- California Healthy Kids Survey (students)
- California School Climate Survey (staff report)
- California School Parents Survey (parent report)
- The Center for Research in Educational Policy School Climate Inventory (staff report)
- Communities That Care Youth Survey (student report)
- The Consortium on Chicago School Research Survey of Chicago Public Schools (students and staff)
- Culture of Excellence & Ethics Assessment (students, staff, parents)
- Effective School Battery (students, teachers)
- National School Climate Center Comprehensive School Climate Inventory (students, staff, parents, community members)
- Perceived School Experiences Scale (students)
- Pride Learning Environment Survey (students)
- Pride Teaching Environment Survey (teachers)
- Search Institute Creating a Great Place to Learn Survey (students, staff)
- Secondary Classroom Climate Assessment Instrument (students, staff)
- Secondary School Climate Assessment Instrument (students, staff)

Discipline

Rationale. The RTT-D competition requires that districts in which students of color or students with disabilities are disproportionately subject to discipline and expulsions must (1) conduct an assessment of the root causes of the disproportionality and (2) develop a detailed plan to address these root causes. Based on an analysis of data collected by the U.S. Department of Education’s Office of Civil Rights, Losen and Gillespie (2012) reported that approximately 839 districts out of 6,779 in the sample suspended more than 10 percent of their enrolled student body at least once, and more than 300 districts suspended more than 25 percent of the African American children enrolled. More than 300 districts suspended more than 25 percent of the students with disabilities, without regard to race. Patterns of disproportionality are not simple or necessarily what many would expect. Skiba, Shure, and Williams (2012) reported that although absolute rates of suspensions are highest in poor urban districts, in secondary schools, and among male students, disparities between African Americans and whites are highest in suburban districts, elementary schools, and among female students. The consequences of punitive, “push-out” discipline policies can be dire: Fabelo et al. (2011) found that expulsion from school significantly increased the likelihood that a student would repeat a grade, not graduate, or be adjudicated into the juvenile justice system.
Plans to address disparities should build students’ capacities to own and manage their behavior as well as teacher and other staff capacity to manage and support behavior (Osher Coggshall, Colombi, Woodruff, & Osher, 2012; Osher, Bear, Sprague, & Doyle, 2010). Addressing discipline disparities as well as reducing exclusionary approaches require multitiered approaches that are implemented in a culturally competent manner (Osher, Cartledge, Oswald, Artiles, Cotinuo, 2004; Osher, Dwyer, Jimerson, & Brown, 2012). Data can be used regularly to monitor how these approaches are being implemented and the results of their implementation (Osher, VanAcker, et al., 2004).

**Social and Emotional Learning (SEL)**

SEL is a term used to describe the processes through which children and adults acquire and effectively apply the knowledge, attitudes, and skills that the Collaborative for Academic, Social, and Emotional Learning (CASEL) has identified as 5 key SEL domains:

- **Self-awareness**: Recognizing one’s emotions and thoughts and their influence on behavior.
- **Self-management**: Regulating one’s emotions, thoughts, and behaviors effectively in different situations.
- **Social awareness**: Taking the perspective of and empathizing with others.
- **Relationship skills**: Establishing and maintaining healthy and rewarding relationships with diverse individuals and groups.
- **Responsible decision making**: Making constructive and respectful choices about personal behavior and social interactions (CASEL, 2012).

A growing body of research has demonstrated that programs teaching SEL promote positive development among children and youth, reduce problem behaviors, and improve academic performance, citizenship, and health-related behaviors (CASEL, 2007; Durlak et al., 2011). SEL can be combined productively with positive behavioral approaches, such as PBIS, as well (Bradshaw, Bottiani, Osher, & Sugai, in press; Osher, Sprague, et al., 2008).

---

**Proposed Discipline Metric**

All districts should report **disaggregated discipline data** annually, including the following:

- Number of students suspended
- Number of incidents
- Reasons for out-of-school suspensions
- Days of lost instruction

From these data, the metric might be the magnitude of the one or two greatest discipline disparities.
**Proposed Social and Emotional Learning Metrics**

There are several good student and teacher-report measures of social and emotional competence, which are reviewed in Kendziora, Weissberg, Ji, and Dusenbury (2011). Among the best of these are the following:

- Devereux Student Strengths Assessment (see www.devereux.org)
- Resilience Module of the California Healthy Kids Survey (see http://chks.wested.org/)

**Self-Regulation**

**Rationale.** Self-regulation, which is key to self-management, involves the management of emotions and emotion-related behaviors, focusing attention, planning and problem-solving, and delay of gratification (Barkley, 1997; Casey et al., 2011; Eisenberg et al., 1997). Students who show positive self-regulation are able to demonstrate persistence and attention to tasks, and are able to manage their emotions in a way that allows them to benefit from a collaborative classroom environment (e.g., handling corrective feedback on their performance from a teacher, successfully resolving disagreements with peers). Students who have difficulty managing negative emotions early on are especially likely to suffer later behavior problems compared with peers (Eisenberg et al., 1997).

Research supports a positive relationship between self-regulation and academic outcomes. For example, Fantuzzo et al. (2007) found that a strong relationship between mathematics and self-regulation. McClelland et al. (2007) found that not only was behavioral regulation positively related to early academic achievement, but that growth in behavioral regulation during the course of a preschool year predicted growth in children’s school readiness in three areas important to cognitive development.

One special application of self-regulation is the concept of grit (Duckworth, Peterson, Matthews, & Kelly, 2007; Duckworth & Quinn, 2009), which is defined as trait-level perseverance and passion for long-term goals, but more commonly described as backbone or “stick-to-it-iveness.” In a series of studies, grit was positively associated with undergraduate GPA, cadet enrollment in a second year at West Point, and better performance in a competitive spelling bee. Grit tends to be associated with older age, higher levels of education, and fewer career changes (Duckworth et al., 2007).

**Proposed Self-Regulation Metrics**

Self-regulation is commonly measured using student self-report instruments.

- An AIR-developed self-regulation scale piloted as part of a school climate survey to students in Grades 5–10 in Cleveland found significant correlations with reading and mathematics achievement, GPA, and attendance (Ahadi, 2011).
- Duckworth’s grit scale is available at http://www.sas.upenn.edu/~duckwort/.
- The Motivated Strategies for Learning Questionnaire (Pintrich, Smith, Garcia, & Mckeachie, 1993) is a good measure of motivation and use of learning strategies.
Physical Health

**Rationale.** To perform well academically, students must first attend school. It is not surprising that students with chronic conditions such as asthma and obesity have poorer attendance than healthy students, and improving student health also improves student attendance. There is evidence that when schools increase health conditions for students, such as by facilitating student access to health services and increasing physical activity, student absences decrease (Basch, 2011). Therefore, schools can take steps to improve student attendance by focusing on improving student health.

Wellness is also important. In 2010, the Centers for Disease Control and Prevention (CDC) undertook a review of 50 studies that examined the relationship between physical activity time at school and academic performance. Just over half of these studies showed that student participation in school-based physical activities conferred positive benefits on children’s academic performance, just under half showed no effect on academic performance, and only one study showed a negative effect (CDC, 2010).

### Proposed Physical Health Metrics

- **Body mass index (BMI).** Sex-specific BMI-for-age percentiles and z-scores are calculated from CDC Growth Charts (2010). Overweight is defined as a BMI-for-age ≥ CDC 95th percentile; children with a BMI-for-age ≥ 99th percentile are “very overweight.”
- **Participation rates in vision, hearing, and dental screenings**
- **Percentage of students with chronic conditions** such as asthma or diabetes who are actively monitored by school nurses.

Mental Health

**Rationale.** For children with mental health needs, schools, not the specialty mental health sector, are the primary providers of services (Hoagwood & Erwin, 1997). Schools have not been very successful, however, in meeting the needs of children with emotional disturbances. Compared with other students with disabilities, students with emotional disturbances are identified later and are more likely to be in restrictive placements and drop out of school (U.S. Department of Education, 2011; Wagner et al., 2006). Children with mental health issues that do not involve disruptive behavior, such as those with depression or anxiety, are particularly likely to be identified late or not at all. In addition, research suggests that that there is a “dual track” to services, in which a disproportionate number of children of color as compared to Caucasian children first receive mental health services only after they encounter the child welfare or juvenile justice system (Huang, 2007).

Schools are in a key position to identify mental health problems early and to provide a link to appropriate services. Best practice in mental health screening involves a three-stage process. First, schools must have a process in place for noticing whether a student may be having an emotional or behavioral challenge. In primary settings, teachers can use the Systematic Screening for Behavior Disorders (Caldarella, Young, Richardson, Young, & Young, 2008; Walker & Severson 1992). Alternatively, a teacher-rating form such as the Vanderbilt Teacher Rating Scale (Wolraich, Feurer, Hannah, Pinnock, & Baumgaertel, 1998), Strengths and Difficulties Questionnaire (SDQ; Goodman,
or the Behavior Assessment System for Children, Behavioral and Emotional Screening System (BASC-2 BESS; Kamphaus & Reynolds, 2007) can be used to screen students based on teacher report.

Following nomination for screening, the family is contacted for consent. The formal screening begins with a brief student questionnaire, such as the Columbia Health Screen (for students ages 11–18; Husky et al., 2011; Schaffer et al., 2004). Youth who score positive on the screening questionnaire or who request to speak with someone should be given a diagnostic clinical interview with a trained mental health professional as soon as possible after the screening to determine if further evaluation is needed. Only those who score positive on the questionnaire and who are deemed to be at risk by a mental health professional receive a referral for further evaluation and intervention planning.

### Proposed Mental Health Metrics

Paper and pencil measures that can be used in the nomination and screening process include the following:

For systematic teacher nominations:

- **Systematic Screening for Behavior Disorders** (Walker & Severson 1992)

For teacher ratings of student symptoms:

- **Vanderbilt Teacher Rating Scale** (Wolraich et al., 1998)
- **Strengths and Difficulties Questionnaire** (Goodman, 1997)
- **Behavior Assessment System for Children, Behavioral and Emotional Screening System** (Kamphaus & Reynolds, 2007)

For screening student self-report:

- **Columbia Health Screen** (Husky et al., 2011; Schaffer et al., 2004)

Another metric is that appropriate identification and referral processes are in place to meet students’ mental health needs. These include the following components:

- A **Student Support Social Worker** who provides crisis intervention, on site counseling, screening, evaluation and triage
- A multidisciplinary **Student Support Team** (SST) for case management and follow up of identified students, coordination with child serving agencies and systems
- **Community Child and Family Serving Providers** (including Mental Health) to provide evaluation and intervention, child welfare services, and juvenile justice coordination

By examining both cognitive and noncognitive data districts, schools, and stakeholders will possess critical information needed to assess and potentially modify practice leading to continuous improvement for students’ school and career outcomes.
CONCLUSION

All young people, particularly students with high needs, require schools with strong foundational conditions for learning. These conditions can be addressed by focusing on improvements in three important areas:

1. Teacher Practice – Building highly effective classroom learning environments;
2. Student Support – Developing a rigorous capacity for student support;
3. Leadership and Management – Establishing the organizational efficacy to implement personalized learning environments.

Although a relentless focus on instruction matters most (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010; Gamoran, Secada, & Marrett, 2000), teachers and school leaders must establish these foundational conditions to personalize learning for all students successfully, and students must be ready to engage and benefit from new models for rigorous instruction (Lee & Ready, 2009; Lee & Smith, 1999; Sebring, Allensworth, Bryk, Easton, & Luppescu, 2006).

Approaches to school improvement that use academic achievement as the sole metric to drive reform have not proven themselves effective. Because deeper learning and personalization depend upon multiple individual and contextual factors, it is important that the continuous improvement process address both cognitive and non-cognitive factors. This must be done in a manner that builds the capacity of districts, schools, teachers, students, and other stakeholders to contribute to the growth of both cognitive and noncognitive attributes that ultimately result in dramatic achievement and college and career readiness. Furthermore, this continuous improvement process must be supported by processes and structures that collect, analyze, and use data efficiently throughout the improvement arc.

We believe this paper identifies critical metrics and related indicators, along with a continuous improvement strategy, to track the establishment of foundational conditions for personalized learning. Utilization of these indicators and metrics will provide educators with the ability to meet the needs of every student, build upon the all important connection between teachers and students and substantially accelerate and deepen student learning toward college and career readiness.
# PROPOSED PERFORMANCE METRICS FOR THE THREE FOUNDATIONAL CONDITIONS FOR ESTABLISHING PERSONALIZED LEARNING IN RTT-D

## Foundational Condition 1—Teacher Practice: Building Highly Effective Classroom Learning Environments

- Teachers are using high-leverage instructional strategies
- Positive classroom management is in place
- All teachers become proficient in building and implementing effective learning environments

<table>
<thead>
<tr>
<th>Quick-Win Measures</th>
<th>Leading and Progress Indicators</th>
<th>Quality Measures Long-Term Sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First 30 days of reform</strong></td>
<td><strong>First 90–360 days of reform</strong></td>
<td><strong>Longer Term Sustainability</strong></td>
</tr>
<tr>
<td>School</td>
<td>Classroom</td>
<td>Student and staff surveys report high levels of engagement and positive culture (e.g., Tripod survey; see Bill &amp; Melinda Gates Foundation, 2010, Consortium on Chicago School Research survey, California School Climate Survey)</td>
</tr>
<tr>
<td>Classroom</td>
<td>Student</td>
<td>Observations show appropriate use of high-leverage instructional strategies (Framework for Teaching (Danielson Group), Classroom Assessment Scoring System (or CLASS, Pianta, L. Paro &amp; Hamre, University of Virginia), UTeach Teacher Observation Protocol (or UTOP, Marder &amp; Walkington, University of Texas-Austin))</td>
</tr>
<tr>
<td>Student</td>
<td></td>
<td>Teacher evaluations show 100% proficiency on high-leverage instructional strategies and classroom management</td>
</tr>
</tbody>
</table>

### School
- School rules and procedures are posted and enforced with consistency (administrator walk-through)
- Student learning objectives (SLOs) are defined, shared, and measured weekly (teacher report)
- Teachers are trained on PLC structure and meeting weekly

### Classroom
- Classroom rules and procedures are posted and enforced with consistency (administrator walk-through)
- Classroom setup is conducive to learning (administrator walk-through)

### Student
- Students feel safe coming to school (short survey)
- Students come to school regularly
- Basic needs are identified for all students (breakfast, school supplies, health care)

### Leading and Progress Indicators
- Discipline referrals, and disparities in referrals by subgroup are reduced
- Student and teacher attendance trends upward and is above 90%
- Teacher participation in PLCs and professional development opportunities is consistent, and outliers are addressed
- Number/percent of students on track based on formative measures of SLOs is increasing (teacher, school, or district created)
- Benchmark assessments in English language arts and mathematics (MAP, Accuity, Diebels) show growth for all students
- Every parent is engaged (direct outreach, student-led conferences, curriculum events, etc.)
- Students have individual goals for learning
- Students are aware of individual and collective growth progress through formative and benchmark assessments (self-charting, data walls, and data assemblies)
- Student-adult relationships identified for at-risk students

### Quality Measures
- Basic needs are met for all students (meals, supplies, physical/mental health care)
- Students feel connected to school and motivated to learn (survey)
- Student achievement is increasing (benchmark and standard assessments)
- Students have completed individualized learning plans and are making sufficient progress toward plan goals (quarterly plan reviews)
### Foundational Condition 2—Student Support: Developing a Rigorous Capacity for Student Support

- Discipline and SEL structure is in place
- Early warning system (EWS) is in place
- Positive classroom management in place
- Infrastructure for a high-capacity student support system is in place (student support social worker, linkages to community mental health providers, student support team, collaboration with child service agencies)

#### Quick-Win Measures
**First 30 days of reform**
- School rules and procedures are posted, shared, and enforced (administrator walk-through)
- EWS data collection is in place
- Student support team is established
- Initial outreach to key external supplemental educational services (SES) partnerships has occurred

#### Leading and Progress Indicators
**First 90–360 days of reform**
- Students are moving through and out of interventions at expected rate
- Number/percent of students failing two or more courses (on-track indicator) is monitored
- Students are identified and monitored on a weekly basis
- 100% of students with chronic conditions who are actively monitored by school nurses, social workers, etc., is declining
- School-based and community providers are aligned on referral and communication process

#### Quality Measures
**Longer Term Sustainability**
- Number, percent, and mobility of students enrolled in differentiated learning programs (i.e., Read 180 for tier 2 students) by program and subject show student growth
- Student social-emotional competence is growing
  - Devereux Early Childhood Assessment
  - Devereux Student Strengths Assessment (DESSA) and DESSA-Mini (an 8-item quick screener)
  - California Healthy Kids Survey, Resilience Module
- Students are receiving appropriate interventions

#### School
- Classroom teachers have access to EWS data and know how to contribute data
- Map of intervention options is available to teachers so they can access resources
- Instructional time is increasing, and time spent managing behavior is decreasing (walk-through)
- Discipline referrals are decreasing

#### Classroom
- Students are exhibiting self-control and monitoring of their behaviors (teacher observation)
- Changes in behavior or achievement are noticed by adults (early warning protocol)

#### Student
- Students’ instructional and social-emotional needs are being met, including systematic screening for health and mental health issues
- College Eligibility index shows that the number and percentage of students taking sufficiently rigorous courses to be on track to enter selective colleges is increasing
**Foundational Condition 3—Leadership & Management: Establishing the Organizational Efficacy to Implement Personalized Learning Environments**

- High-functioning school leadership teams (SLTs)
- Broader stakeholder group participation in planning
- Programmatic and strategic coherence between district and school
- Rigorous delivery system for district and school professional development
- Districtwide infrastructure for the student support system
- Districtwide infrastructure for data collection, analysis, and reform evaluation

### Quick-Win Measures
*First 30 days of reform*

### Leading and Progress Indicators
*First 90–360 days of reform*

### Quality Measures
*Longer Term Sustainability*

<table>
<thead>
<tr>
<th>District</th>
<th>School</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Districtwide professional development opportunities are communicated</td>
<td>- School goals are transparent and shared broadly</td>
</tr>
<tr>
<td>- District and school reform plans are aligned</td>
<td>- Roles for school leadership teams are documented in writing</td>
</tr>
<tr>
<td>- Goals for the district and school are broadly communicated and known in the community</td>
<td>- School leadership team established, meets regularly with minutes and actions</td>
</tr>
<tr>
<td>- Positive behavioral expectations plan in place</td>
<td>- Positive behavioral expectations plan in place</td>
</tr>
<tr>
<td>- Classroom observations are a routine part of administrators schedule</td>
<td>- Systems and structures for behavior and academic monitoring are in place (behavior, SLT, PLC, instructional coaching)</td>
</tr>
<tr>
<td>- SLT members are able to implement tasks from plan (weekly plan monitoring)</td>
<td>- SLT members are able to implement tasks from plan (weekly plan monitoring)</td>
</tr>
<tr>
<td>- Targeting coaching and professional development are in place for SLT as needed</td>
<td>- Classroom observations show positive trends in instructional time and student engagement</td>
</tr>
<tr>
<td>- Classroom observations show positive trends in instructional time and student engagement</td>
<td>- Stakeholder engagement in planning is the norm</td>
</tr>
<tr>
<td>- Stakeholder engagement in planning is the norm</td>
<td>- School planning process is aligned to the district but also reflects and addresses teacher needs (needs assessment)</td>
</tr>
<tr>
<td>- Districtwide continuous improvement process promotes alignment of activities at the district, school, and classroom level</td>
<td>- Plans contain multiple measures, quick strategic wins, leading indicators, quality of implementation, and so on, and are monitored and reported on regularly</td>
</tr>
</tbody>
</table>
REFERENCES


Bradshaw, C. P., Bottiani, J. H., Osher, D., & Sugai, G. (In press). The integration of positive behavioral interventions and supports (PBIS) and social emotional learning (SEL). In M. D. Weist, N. A.
Lever, Bradshaw, & Owens (Eds.), *Handbook of school mental health* (2nd ed.). New York: Springer.


APPENDIX.
AIR’S COLLEGE ELIGIBILITY INDEX: A SAMPLE ON-TRACK MEASURE

The College Eligibility Index for high school students is based on the application requirements for selective, four-year colleges. The index is composed of seven indicators: performance in English, mathematics, science, social studies, and foreign language courses, mathematics course-taking, and high school grade point average. The specific calculations for each indicator are detailed in the following sections. The College Eligibility Index overall is scored as follows:

- “Off track” if a student has two or more of the seven indicators scored in the “off track” range,
- “On track” if no more than one indicator is “off track” and the rest are all “on track” or better, and
- “On track to thrive” if a student has at least five indicators in the “on track to thrive” range and the rest are “on track.”

### Performance in English Courses

<table>
<thead>
<tr>
<th>Indicators for Freshmen</th>
<th>(2) received below a C in 1 class</th>
<th>(3) received a C or above in 1 class</th>
<th>(4) received a B or above in 1 class</th>
</tr>
</thead>
<tbody>
<tr>
<td>On track to thrive</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On track</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off track</td>
<td>1 or 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicators for Sophomores</th>
<th>(2) received below a C in 2 classes</th>
<th>(3) received a C or above in 2 classes</th>
<th>(4) received a B or above in 2 classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>On track to thrive</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On track</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off track</td>
<td>1 or 2</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicators for Juniors</th>
<th>(2) received below a C in 3 classes</th>
<th>(3) received a C or above in 3 classes</th>
<th>(4) received a B or above in 3 classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>On track to thrive</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On track</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off track</td>
<td>1 or 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Indicators for Seniors

<table>
<thead>
<tr>
<th>(1) Did not take or did not pass 3 classes</th>
<th>(2) received below a C in 4 classes</th>
<th>(3) received a C or above in 4 classes</th>
<th>(4) received a B or above in 4 classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>On track to thrive</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On track</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off track</td>
<td>1 or 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Performance in Math Courses Taken**

### Indicators for Freshmen

<table>
<thead>
<tr>
<th>(1) Did not take or did not pass 1 class</th>
<th>(2) received below a C in 1 class</th>
<th>(3) received a C or above in 1 class</th>
<th>(4) received a B or above in 1 classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>On track to thrive</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On track</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off track</td>
<td>1 or 2</td>
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</tbody>
</table>

### Indicators for Sophomores

<table>
<thead>
<tr>
<th>(1) Did not take or did not pass 1 class</th>
<th>(2) received below a C in 1 class</th>
<th>(3) received a C or above in 1 class</th>
<th>(4) received a B or above in 2 classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>On track to thrive</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On track</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off track</td>
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</table>

### Indicators for Juniors

<table>
<thead>
<tr>
<th>(1) Did not take or did not pass 2 classes</th>
<th>(2) received below a C in 1 class</th>
<th>(3) received a C or above in 2 classes</th>
<th>(4) received a B or above in 3 classes</th>
</tr>
</thead>
<tbody>
<tr>
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<td>3</td>
<td></td>
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</tr>
<tr>
<td>Off track</td>
<td>1 or 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Indicators for Seniors

<table>
<thead>
<tr>
<th>(1) Did not take or did not pass 3 classes</th>
<th>(2) received below a C in 1 class</th>
<th>(3) received a C or above in 3 classes</th>
<th>(4) received a B or above in 4 classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>On track to thrive</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On track</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off track</td>
<td>1 or 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Specific Math Courses Taken

#### Indicators for Freshmen

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) Did not take or did not pass Algebra 1</td>
<td>4</td>
</tr>
<tr>
<td>(2) received below a C in Algebra I</td>
<td>3</td>
</tr>
<tr>
<td>(3) received a C or above in Algebra I</td>
<td>1 or 2</td>
</tr>
<tr>
<td>(4) received a B or above in Algebra I</td>
<td></td>
</tr>
</tbody>
</table>

#### Indicators for Sophomores

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Did not take or did not pass geometry</td>
<td>4</td>
</tr>
<tr>
<td>(2) received below a C in geometry</td>
<td>3</td>
</tr>
<tr>
<td>(3) received a C or above in geometry</td>
<td>1 or 2</td>
</tr>
<tr>
<td>(4) received a B or above in geometry</td>
<td></td>
</tr>
</tbody>
</table>

#### Indicators for Juniors

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Did not take or did not pass Algebra 2</td>
<td>4</td>
</tr>
<tr>
<td>(2) received below a C in Algebra II</td>
<td>3</td>
</tr>
<tr>
<td>(3) received a C or above in Algebra II</td>
<td>1 or 2</td>
</tr>
<tr>
<td>(4) received a B or above in Algebra II</td>
<td></td>
</tr>
</tbody>
</table>

#### Indicators for Seniors

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Did not take or did not pass trigonometry*</td>
<td>4</td>
</tr>
<tr>
<td>(2) received below a C in trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>(3) received a C or above in trigonometry</td>
<td>1 or 2</td>
</tr>
<tr>
<td>(4) received a B or above in trigonometry</td>
<td></td>
</tr>
</tbody>
</table>

* Seniors could have also taken alternative mathematics classes (i.e., precalculus or calculus) to which these same standards would apply.
<table>
<thead>
<tr>
<th><strong>Indicators for Freshmen</strong></th>
<th>(1) Did not take or did not pass a class</th>
<th>(2) received below a C in 1 class</th>
<th>(3) received a C or above in 1 class</th>
<th>(4) received a B or above in 1 class</th>
</tr>
</thead>
<tbody>
<tr>
<td>On track to thrive</td>
<td>4</td>
<td>On track</td>
<td>1 or 3</td>
<td>Off track</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Indicators for Sophomores</strong></th>
<th>(1) Did not take or did not pass 1 class</th>
<th>(2) received below a C in 1 or more classes</th>
<th>(3) received a C or above in 1 class</th>
<th>(4) received a B or above in 2 classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>On track to thrive</td>
<td>4</td>
<td>On track</td>
<td>3</td>
<td>Off track</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Indicators for Juniors</strong></th>
<th>(1) Did not take or did not pass 2 classes</th>
<th>(2) received below a C in 1 or more classes</th>
<th>(3) received a C or above in 2 classes (at least 1 laboratory class)</th>
<th>(4) received a B or above in 3 classes (at least 1 laboratory class)</th>
</tr>
</thead>
<tbody>
<tr>
<td>On track to thrive</td>
<td>4</td>
<td>On track</td>
<td>3</td>
<td>Off track</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Indicators for Seniors</strong></th>
<th>(1) Did not take or did not pass 3 classes</th>
<th>(2) received below a C in 1 or more classes</th>
<th>(3) received a C or above in 3 classes (at least 2 laboratory classes)</th>
<th>(4) received a B or above in 4 classes (at least 2 laboratory classes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>On track to thrive</td>
<td>4</td>
<td>On track</td>
<td>3</td>
<td>Off track</td>
</tr>
</tbody>
</table>
### Performance in Social Studies Courses

#### Indicators for Freshmen
- (1) Did not take or did not pass 1 class
- (2) received below a C in 1 class
- (3) received a C or above in 1 class
- (4) received a B or above in 1 class

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>On track to thrive</td>
<td>4</td>
</tr>
<tr>
<td>On track</td>
<td>1 or 3</td>
</tr>
<tr>
<td>Off track</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Indicators for Sophomores
- (1) Did not take or did not pass 1 class
- (2) received below a C in 1 or more classes
- (3) received a C or above in 1 or more classes
- (4) received a B or above in 1 or more classes

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>On track to thrive</td>
<td>4</td>
</tr>
<tr>
<td>On track</td>
<td>1 or 3</td>
</tr>
<tr>
<td>Off track</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Indicators for Juniors
- (1) Did not take or did not pass 1 class
- (2) received below a C in 1 or more classes
- (3) received a C or above in 2 classes
- (4) received a B or above in 2 classes

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>On track</td>
<td>3</td>
</tr>
<tr>
<td>Off track</td>
<td>1 or 2</td>
</tr>
</tbody>
</table>

#### Indicators for Seniors
- (1) Did not take or did not pass 2 classes
- (2) received below a C in 2 classes
- (3) received a C or above in 3 classes (including 1 history class)
- (4) received a B or above in 3 classes (including 1 history class)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>On track to thrive</td>
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<tr>
<td>On track</td>
<td>3</td>
</tr>
<tr>
<td>Off track</td>
<td>1 or 2</td>
</tr>
</tbody>
</table>
### Performance in Foreign Language Courses in High School

#### Indicators for Freshmen
- (1) Did not take or did not pass 1 class
- (2) received below a C in 1 class
- (3) received a C or above in 1 class
- (4) received a B or above in 1 class

<table>
<thead>
<tr>
<th>On track to thrive</th>
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</tr>
</thead>
<tbody>
<tr>
<td>On track</td>
<td>1 or 3</td>
</tr>
<tr>
<td>Off track</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Indicators for Sophomores
- (1) Did not take or did not pass 1 class
- (2) received below a C in 1 or more classes
- (3) received a C or above in 1 or more classes
- (4) received a B or above in 1 or more classes

<table>
<thead>
<tr>
<th>On track to thrive</th>
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</tr>
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<tbody>
<tr>
<td>On track</td>
<td>1 or 3</td>
</tr>
<tr>
<td>Off track</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Indicators for Juniors
- (1) Did not take or did not pass 1 class
- (2) received below a C in 1 or more classes
- (3) received a C or above in 2 or more classes
- (4) received a B or above in 2 or more classes

<table>
<thead>
<tr>
<th>On track to thrive</th>
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</thead>
<tbody>
<tr>
<td>On track</td>
<td>3</td>
</tr>
<tr>
<td>Off track</td>
<td>1 or 2</td>
</tr>
</tbody>
</table>

#### Indicators for Seniors
- (1) Did not take or did not pass 2 years of same foreign language
- (2) received below a C in 2 years of same foreign language
- (3) received a C or above in 2-3 years of the same foreign language
- (4) received a B or above in 3 years of the same foreign language

<table>
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<tr>
<td>On track</td>
<td>3</td>
</tr>
<tr>
<td>Off track</td>
<td>1 or 2</td>
</tr>
</tbody>
</table>
### High School GPA (based on 4.0 scale)

<table>
<thead>
<tr>
<th>Indicators for Freshmen</th>
<th>(1) below 2.50</th>
<th>(2) 2.50 to 3.00</th>
<th>(3) 3.0 to 3.5</th>
<th>(4) 3.5 and higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>On track to thrive</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On track</td>
<td>2 or 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off track</td>
<td>1</td>
<td></td>
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<thead>
<tr>
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<th>(1) below 2.50</th>
<th>(2) 2.50 to 3.00</th>
<th>(3) 3.0 to 3.5</th>
<th>(4) 3.5 and higher</th>
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<td>2 or 3</td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td>1</td>
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<tr>
<td>Off track</td>
<td>1</td>
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<th>(2) 2.50 to 3.00</th>
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<th>(4) 3.5 and higher</th>
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