Quality Review Report

2016-2017

Bronx Engineering and Technology Academy
High school 10X213
99 Terrace View Ave.
Bronx
NY 10463

Principal: Karalyne Sperling

Dates of Review:
March 30, 2017 - March 31, 2017

Lead Reviewer: Lenneen Gibson
The Quality Review Report

The Quality Review is a two-day school visit by an experienced educator. During the review, the reviewer visits classrooms, talks with parents, students, teachers, and school leaders and uses a rubric to evaluate how well the school is organized to support student achievement.

The Quality Review Report provides a rating for all ten indicators of the Quality Review Rubric in three categories: Instructional Core, School Culture, and Systems for Improvement. One indicator is identified as the Area of Celebration to highlight an area in which the school does well to support student learning and achievement. One indicator is identified as the Area of Focus to highlight an area the school should work on to support student learning and achievement. The remaining indicators are identified as Additional Finding. This report presents written findings, impact, and site-specific supporting evidence for six indicators.

Information about the School

Bronx Engineering and Technology Academy serves students in grade 9 through grade 12. You will find information about this school, including enrollment, attendance, student demographics, and data regarding academic performance, at http://schools.nyc.gov/Accountability/tools/report/default.htm.

School Quality Ratings

<table>
<thead>
<tr>
<th>Instructional Core</th>
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</thead>
<tbody>
<tr>
<td>To what extent does the school...</td>
</tr>
<tr>
<td>1.1 Ensure engaging, rigorous, and coherent curricula in all subjects, accessible for a variety of learners and aligned to Common Core Learning Standards and/or content standards</td>
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<tr>
<td>1.2 Develop teacher pedagogy from a coherent set of beliefs about how students learn best that is informed by the instructional shifts and Danielson Framework for Teaching, aligned to the curricula, engaging, and meets the needs of all learners so that all students produce meaningful work products</td>
</tr>
<tr>
<td>2.2 Align assessments to curricula, use on-going assessment and grading practices, and analyze information on student learning outcomes to adjust instructional decisions at the team and classroom levels</td>
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</tbody>
</table>
## School Culture

<table>
<thead>
<tr>
<th>Area of Celebration</th>
<th>Rating</th>
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</thead>
<tbody>
<tr>
<td>Maintain a culture of mutual trust and positive attitudes that supports the academic and personal growth of students and adults</td>
<td>Proficient</td>
</tr>
<tr>
<td>Establish a culture for learning that communicates high expectations to staff, students and families, and provide supports to achieve those expectations</td>
<td>Proficient</td>
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## Systems for Improvement

<table>
<thead>
<tr>
<th>Area of Celebration</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make strategic organizational decisions to support the school’s instructional goals and meet student learning needs, as evidenced by meaningful student work products</td>
<td>Proficient</td>
</tr>
<tr>
<td>Establish a coherent vision of school improvement that is reflected in a short list of focused, data-based goals that are tracked for progress and are understood and supported by the entire school community</td>
<td>Proficient</td>
</tr>
<tr>
<td>Observe teachers using the Danielson Framework for Teaching along with the analysis of learning outcomes to elevate school-wide instructional practices and implement strategies that promote professional growth and reflection</td>
<td>Proficient</td>
</tr>
<tr>
<td>Engage in structured professional collaborations on teams using an inquiry approach that promotes shared leadership and focuses on improved student learning</td>
<td>Proficient</td>
</tr>
<tr>
<td>Evaluate the quality of school-level decisions, making adjustments as needed to increase the coherence of policies and practices across the school, with particular attention to the CCLS</td>
<td>Proficient</td>
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</tbody>
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Area of Celebration

<table>
<thead>
<tr>
<th>Quality Indicator:</th>
<th>1.4 Positive Learning Environment</th>
<th>Rating:</th>
<th>Proficient</th>
</tr>
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</table>

Findings

Culture building is supported by advisory and restorative justice programs, a student council, and targeted attendance supports.

Impact

All students are known well by an adult in the school community. Effective approaches promote an inclusive environment in which student voice is welcomed and valued.

Supporting Evidence

- The school has supports in place such as an advisory program, restorative justice discipline, and a student council, resulting in a safe and inclusive school culture. Students meet weekly during advisory to monitor their academic performance and attendance, conduct self-reflection activities on their classes and create goals for challenging courses. Restorative justice practices allow students to engage in peer mediation and to support community building. Student voice is welcomed through the student council. The student council meets bi-weekly and also meets once a month with the principal to discuss initiatives such as: hosting cohort basketball games, offering computer science classes, and computer coding opportunities. As a result of students collaborating with the administration, the advanced placement computer science class is included in the course offerings. A cohort basketball tournament was instituted as well. Award ceremonies lauding students for their academic achievement, stellar attendance, and improved performance, support a positive school culture. As a result of these practices, the number of incidences reported in the Online Occurrence Reporting System has decreased this year.

- The attendance team meets weekly to discuss targeted students, interventions such as counseling and parent meetings with follow-up meetings to ensure that students are present each day. The school intervention team meets bi-monthly to monitor targeted students and review students’ accommodations for testing and Individualized Education Programs (IEPs). At risk counseling, mentoring by an adult staff member, and monitoring of student academic progress are consistently undertaken to ensure that students’ socio-emotional needs are being met. A review of the mid-year summary of disaggregated attendance data showed that there was an increase in student attendance as a result of these practices.

- The Youth Development Institute has a partnership with the school to provide a small fraction of female students in grades nine through eleven with leadership opportunities to instill empowerment through the Young Women’s Power Circle. In collaboration with school staff, this initiative in tandem with restorative justice serves to provide ongoing leadership within the school supporting the development of student leaders.
Area of Focus

<table>
<thead>
<tr>
<th>Quality Indicator:</th>
<th>2.2 Assessment</th>
<th>Rating:</th>
<th>Developing</th>
</tr>
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Findings

The school is developing its use of common assessments to measure student progress towards goals across grades and subject areas. Teachers’ assessment practices inconsistently reflect the use of checks for understanding and students’ self-assessment.

Impact

The results of common assessments are inconsistently used to adjust curricula and instruction. The uneven use of checks for understanding and limited opportunity for student self-assessment hinders on-the-spot adjustments to instruction to meet the needs of all learners.

Supporting Evidence

- The school is developing their use of common assessments to determine if students are on track to graduate. Seniors deemed to graduate are tracked for successfully passing required Regents exams. Students that needed to pass one of these exams were identified and were administered a mock January Regents. Results of the exam data were disseminated to the teachers and action plans were created. Interventions such as after school tutoring, and Saturday Regents preparation were offered. Although seniors were targeted for Regents completion to graduate, it was not evident how the results of the mock assessment were used to modify instruction across subject areas. During the leadership meeting a seventh grade Global Regents preparatory class was discussed, however, how the decision was made to host a preparatory class was not clarified.

- January 2017 Regents data for the class of 2017 and 2018 were disaggregated for passing and non-passing students in all subject areas. The number of focus students for each subject area was identified and students were provided with interventions such after-school tutoring and Saturday Regents academy. It was not evident how this data informed revisions to instructional practices or to the curricula thus leading to a diminished effect of these supports.

- In a social studies class, the teacher conferenced with students, kept conference notes, and provided feedback to the students’ about their debate project. Based on the data collected while conferencing with students, the teacher made an on-the-spot-adjustment to the lesson by conducting a quick review of the concept of annexation. However, a task specific rubric to self-assess the debate was not in evidence. In an English Language Arts (ELA) class, a teacher checked for understanding by conferencing with students as they crafted their argumentative task. Based on the feedback provided to the groups, the teacher adjusted the groups by pairing a student with an “expert” student within the groups. Students were not observed utilizing a rubric or a checklist while working on their task to self-assess their work; however, in an ELA class with diverse learners, students were observed using a rubric entitled, “Rubric for Friendly Letter,” “Comic Strip Reveal,” or “Cinquain Poem” rubric as they drafted their character analysis essays. Opportunity for peer and self-assessment was limited. In most classrooms visited there was inconsistent use of checks for understanding preventing additional learning to occur.
Additional Finding

<table>
<thead>
<tr>
<th>Quality Indicator:</th>
<th>1.1 Curriculum</th>
<th>Rating:</th>
<th>Proficient</th>
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Findings

School leaders and faculty ensure that curricula are aligned to the Common Core Learning Standards and incorporate the instructional shifts emphasizing citing textual evidence and arguing a claim. Curricula are modified using student data.

Impact

These aligned curricula build coherence and promote college and career readiness. Curricula are planned and revised ensuring cognitive engagement of all learners.

Supporting Evidence

- An ELA syllabus was modified for students needed to pass the ELA Regents exam. The Collections curriculum was revised to cover a non-fiction unit that focused on structuring arguments, gathering evidence and peer discussion. Teacher created tasks were incorporated to compliment the changes instead of the tasks provided by the program. A teacher team conducted lesson studies in order to revamp the ELA curriculum so it focused on argumentative writing. A U.S. history and government unit plan indicated changes in the sequencing of topics, those being omitted, and the revision of assignments. The adjustments were based on the topics covered on the US History Regents to ensure that the curricula are completely covered before the exam.

- Unit plans in ELA and social studies emphasized the citing of textual evidence and crafting arguments with inter-disciplinary connections to US History. In ELA, students were required to analyze foundational U.S. documents and to analyze and evaluate arguments such as Supreme Court rulings. Similarly, a US History unit plan required students to write an essay detailing the extent the expansion of US borders led to a rise in sectionalism. Their claims were to be supported by relevant evidence as to how the United States balanced national and regional interests.

- In a Living Environment unit, students were tasked with writing an essay based on the prompt, “How are human activities altering the physical and living environment?” They were required to cite evidence from texts, videos, and data sources to substantiate their claim. In a chemistry class, students were to conduct research on the modern day uses of nuclear chemistry by citing evidence. Having students incorporate skills and shifts across varied content areas leads to coherence and readiness for the next level.
Additional Finding

### Quality Indicator

| 1.2 Pedagogy | Rating: Proficient |

#### Findings

Across classrooms, teaching practices and student discussions are aligned to the curricula and reflect a set of beliefs about how students learn best, with a focus on collaboration and argumentative discussion.

#### Impact

Student work products and discussions reflect high levels of student thinking and participation, informed by the Danielson *Framework for Teaching* as well as the instructional shifts.

#### Supporting Evidence

- Developing the skill of using text-based evidence to support arguments in discussion is the school’s instructional focus. School leaders believe that mastery of this skill will result in stronger academic writing in literacy and mathematics, increased communication and collaboration. Students demonstrating college and career readiness through argumentative writing and verbal debate is expected as well. In a social studies class, students analyzed the United States foreign policy decisions at the turn of the century. Working in pairs in preparation for their debate project, students reviewed excerpts from primary source documents and determined if they were taking a pro or con stance regarding the annexation of the Philippines. Student choice was permitted in determining which side of the debate one wanted to defend. In an ELA class, students used textual evidence to analyze the development of characters in the *The Crucible*. Students were overheard using accountable talk stems such as “I agree” and were observed delving into the text to find evidence to support whether a character was humble and tracing the character’s development.

- In an ELA class with diverse learners, students at different stages of preparation were working on constructing their argumentative essay task. Using themes from the texts students devised customized claims such as, “Why it is hard for people to adapt to change?” Using evidence from their anchor texts, students developed their essays. In a social studies class, some students were conducting research in preparation for their human rights student facilitator project. Students were gathering evidence for their PowerPoint slide presentation to support multiple perspectives on topics such as, apartheid in South Africa, the Holocaust, the Taliban’s treatment of women, the Rwandan genocide, and the Indian independence movement. Student choice was permitted in the selection of a topic.

- In a science class with diverse learners, students were working on experimental data problem sets. In their groups, student participation and high levels of thinking were observed as they explained concepts such as independent variables to another student in their native language. Students were able to articulate the goal of their task and were cognizant that their tasks were differentiated. In an ELA class, students analyzed the presentation of characters in *The Crucible*. A character choice board with varied tasks was provided and required students to write a three-paragraph character analysis essay about one of the characters in *The Crucible*. Although their tasks were slightly different, students were heard working with one another in providing evidence for their essay and debating what evidence was stronger to support their writing. In a mathematics class students engaged in a station activity with varied tasks solving systems of equations. Students were observed discussing their assigned problems, asking each other questions, and explaining the process to one another.
Findings

School leaders and staff members communicate high expectations connected to college and career readiness to families. The school community consistently establishes a culture for learning by articulating high expectations for all students.

Impact

Feedback to families and students help them understand their progress and preparation towards college and career readiness.

Supporting Evidence

- School leaders regularly communicate high expectations to families that are connected to a path of college and career readiness. Parents are informed through the school's online grading portal, report cards, parent teacher conferences, cohort parent meetings, notices sent to the home as well as phone calls, cohort specific progress reports, and the school’s website. Teachers also reach out to parents via email to convey how their child is performing in their classes. Parent workshops are held specifically to explain their child’s transcript. These workshops are held on the weekends to enable as many parents as possible to attend. Topics such as health and wellness, immigration, and English as a Second Language were highlighted during the parent meeting.

- The school community coordinates its efforts to communicate high expectations to all students and provide feedback and support that prepares students for college and career readiness. A college counselor and the college and career readiness team coordinates college visits to city, in-state, out-of-state, and private colleges, as well as on-site presentations from military institutions. Students have the opportunity to take advanced placement (AP) courses and college level courses through College Now. The school has its Career and Technical Education credentials in engineering and offers a sequence of engineering courses that culminates in students receiving Certiport certification. During the student meeting the students spoke about the college trips, AP courses, and weekly advisory. Students shared that the work is challenging but they are learning a lot from the courses.

- Through guidance programs the school prepares the students for college and varied careers. The school has instituted a program known as BUILD that provides students with entrepreneurship opportunities and experiential learning. This three year program provides support in skill acquisition through the planning and launching of a small business. Additionally they learn how to grow and expand their business partnerships with corporations in the construction, computer programming, and architecture sectors providing paid internship opportunities. The four-year graduation rate has increased from six percent over the last three years. In addition, the school is making steady gains in the percentage of students graduating from college.
Additional Finding

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<th>Quality Indicator:</th>
<th>4.2 Teacher Teams and Leadership Development</th>
<th>Rating:</th>
<th>Proficient</th>
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Findings

Teachers analyze student work for students they share or whom they target. Distributive leadership practices such as assignment of peer collaborative teachers are in place.

Impact

Analysis of student work results in improved teacher practice and progress towards goals for groups of students. Teachers have a voice in key decisions that affect student learning across the school.

Supporting Evidence

- A tenth grade cross-curricular teacher team was observed engaging in inquiry work. Teachers used a prescribed protocol to look at a student's global history essay. Teachers analyzed the student work and discussed the organization; whether relevant facts to support the thesis statement were incorporated, and the thoroughness of the introduction. Next steps included crafting a rubric to address organization, grammar, and sentence structure. Furthermore, plans for specific support in subject and verb agreement, and strategies for inter-disciplinary connections were made. Team collaboration results in teachers understanding student performance in different content areas and realizing the similar trends that exist in student writing across subject areas. Teachers readily voiced that sharing strategies strengthen teacher practice and student learning.

- An English Language Arts team analyzed a group of student's argumentative baseline writing samples. Profiles of the students' performance on this baseline were created and indicated the learning progressions, learning targets, plans of action, and evidence of success. Minutes from this meeting addressed what the team learned from the analysis and next steps for the students. Working as a team, teachers devised tailored lesson plans for the targeted students and continued to analyze the students' work. They continue to share best practices focusing on the teaching of the argumentative essay, and constructing the “perfect” argumentative lesson plan. The students show persistence in their writing and are receiving support in strengthening the quality of their overall essay.

- Distributive leadership structures allowed teachers to take a significant role in designing the school's instructional focus as well as devising the school's grading policy. The Peer Collaborative Teacher (PCT) is included in the principal's cabinet. Initiatives, such as the advisory curriculum, promoting positive school culture, AP for All, constructing a peer intervisitation schedule, the establishment of lab classrooms, constructing the department lesson study inquiry guide, and providing instructional support to struggling teachers are the result of the PCT team.