Quality Review Report

2019-2020

Science, Technology and Research Early College
High School at Erasmus

Secondary School 17K543

911 Flatbush Avenue
Brooklyn
NY 11226

Principal: Eric Blake

Dates of Review:
October 22, 2019 - October 23, 2019

Lead Reviewer: Kevin Bradley
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

Science, Technology and Research Early College High School at Erasmus serves students in grade 6 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>
<th>Area</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent does the school...</td>
<td></td>
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</tr>
<tr>
<td>1.1 Ensure engaging, rigorous, and coherent curricula in all subjects, accessible for a variety of learners and aligned to State standards and/or content standards</td>
<td>Additional Finding</td>
<td>Well Developed</td>
</tr>
<tr>
<td>1.2 Develop teacher pedagogy from a coherent set of beliefs about how students learn best that is informed by State standards and the 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>
<td>Area of Focus</td>
<td>Well Developed</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>
<td>Additional Finding</td>
<td>Well Developed</td>
</tr>
</tbody>
</table>
## School Quality Ratings continued

### School Culture

**To what extent does the school...**

<table>
<thead>
<tr>
<th>Area</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4 Maintain a culture of mutual trust and positive attitudes that supports the academic and personal growth of students and adults</td>
<td>Additional Finding</td>
</tr>
<tr>
<td>3.4 Establish a culture for learning that communicates high expectations to staff, students, and families, and provide supports to achieve those expectations</td>
<td>Area of Celebration</td>
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</tbody>
</table>

### Systems for Improvement

**To what extent does the school...**

<table>
<thead>
<tr>
<th>Area</th>
<th>Rating</th>
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<tbody>
<tr>
<td>1.3 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>Additional Finding</td>
</tr>
<tr>
<td>3.1 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>Additional Finding</td>
</tr>
<tr>
<td>4.1 Observe teachers using the Danielson Framework for Teaching along with the analysis of learning outcomes to elevate schoolwide instructional practices and implement strategies that promote professional growth and reflection</td>
<td>Additional Finding</td>
</tr>
<tr>
<td>4.2 Engage in structured professional collaborations on teams using an inquiry approach that promotes shared leadership and focuses on improved student learning</td>
<td>Additional Finding</td>
</tr>
<tr>
<td>5.1 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 State standards</td>
<td>Additional Finding</td>
</tr>
</tbody>
</table>
Area of Celebration

<table>
<thead>
<tr>
<th>Quality Indicator:</th>
<th>3.4 High Expectations</th>
<th>Rating:</th>
<th>Well Developed</th>
</tr>
</thead>
</table>

Findings
School leaders consistently communicate high expectations to the entire staff. Teacher teams and staff establish a culture for learning that systematically communicates a unified set of high expectations for all students.

Impact
Teachers hold each other accountable for instructional capacity through structures such as grade level inquiry teams. School staff provide clear, focused, and effective feedback and guidance supports such as early college to ensure that students own their educational experience and are prepared for the next level.

Supporting Evidence

- School leaders conduct frequent classroom observations to provide feedback utilizing the Danielson Framework for Teaching as the standard for professionalism, quality instruction, and high expectations. A faculty handbook communicates high expectations through policies and protocols such as characteristics of good teaching, model punctuality, preparedness, lesson planning, and team teaching. A professional learning plan makes clear that school leaders support teachers in their understanding of expectations with a variety of topics including developing valid and reliable assessments. Mutual accountability exists for teachers in weekly grade-level team inquiry meetings that focus on students who are in the lowest third as teams hold each other accountable for closing the achievement gap. A teacher reported, “The fact that we meet weekly at grade level and share information and support, helps students to achieve higher. For our lower-third students, we have to bring in the work, that professionalism is exhibited in the high expectations we hold each other accountable to.”

- The school’s culture for learning consistently communicates high expectations that help prepare students for their next level of education. In 2018-2019, the school had a 100 percent four-year graduation rate. That same year, 91 percent of graduating students met the four-year college ready index, nearly double the Borough and Citywide average. The school’s postsecondary college enrollment rate is at 94.1 percent. The school implements a multi-year transition plan that gradually introduces students to college-going experiences and the demands of college coursework, while providing a wide variety of supports tailored to individual needs. For example, study groups for all college classes occur weekly with tutors for math and English.

- Clear, focused, and effective feedback and guidance supports aligns to high expectations for all students. The structures for student success begin in ninth and tenth grades, as students participate in a summer bridge program on campus for incoming ninth graders focusing on English, math, and college study skills. Weekly pre-college orientation seminars in the fall introduce ninth graders to various college departments and facilities and provide a hands-on look at scientific study. Six-week academic seminars in the second semester for ninth graders begin in-depth study of areas such as anatomy, archaeology, and law. In eleventh and twelfth grades, students take college courses for credit, including summer bridge courses that fill in gaps in skills and knowledge between high school and college work. Cohort courses are designed for the school’s students but taught by college faculty on the college campus. Waiver courses include high school students in college courses with college students. Both the high school and Brooklyn College offer a wide array of support services to help ensure that students succeed in both high school and college coursework, including navigating admissions workshops designed to provide small group and individual advisement for the college process for seniors.
Findings
Across the vast majority of classrooms, teaching practices are aligned to the curricula, reflecting a coherent set of beliefs that students learn best when they are involved in student-centered discussions. Students are involved in high-level discussions and produce meaningful work products.

Impact
Across the vast majority of classrooms, student work products reflect high levels of student participation and ownership. However, there were missed opportunities for engagement via student-to-student discussions.

Supporting Evidence

- During a sixth-grade Global History class looking at Egyptian civilizations, there were many opportunities for student-to-student discussions via turn and talks, with students connecting their learning back to an essential question, “Should ancient Egypt be considered a civilization?” During an Algebra I Integrated Co-Teaching (ICT) class, a student demonstrated a problem at the board and the teacher posed questions to the student at the board. However, student-to-student discussion with other students who were sitting in pairs was limited as most worked individually. During a physics class, the teacher directed questions to students regarding a student hypothesis of projected objects. A number of students had opportunities to answer teacher questions and were involved in a teacher-to-student discussion, though there were no opportunities for group discussions. Across the vast majority of classes there were high levels of participation. However, in limited instances, there were missed opportunities for student-to-student discussion.

- During an electrical construction class, the teacher called on individual students to read learning objectives and the do now question from the whiteboard. Student monitors modeled techniques for students, however student-to-student discussion to extend learning was lacking. During a global studies class discussion comparing Greek and American democracy, students worked in pairs on annotating text with Venn diagrams. A student-centered discussion progressed with students answering questions and commenting on peers’ statements. While the students discussed the democracy questions, there was little reference back to the text they were annotating at beginning of lesson. During a global class, a fishbowl discussion with a group of seven students in middle of room discussed text resources that students on the outside of the group could follow along with their own copies. Students on the outside of the group had opportunities to replace a peer on the inside to offer their thoughts to the discussion. Across the vast majority of classrooms, student discussions reflected high levels of ownership.

- During an eighth-grade English Language Arts (ELA) Socratic seminar environment with students discussing whether technology has done more harm than good to society, students posed their own questions to panel members and panel members gave their responses and opinions. The teacher facilitated the discussion when needed, though the discussion was mainly student-led. During a seventh-grade Socratic seminar on Call Me Maria the teacher spent some time making sure students were clear about their roles. All students had the opportunity to write their questions about the text on index cards and put them into a box that the fishbowl group pulled out and discussed. During a sixth-grade ELA Socratic seminar, all students in the inner part of room spoke and were involved and the first group received feedback from peers on outer edge after their discussion. Across the vast majority of classrooms, student participation in discussions reflected high levels of student thinking.
Additional Finding

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

Curricula are aligned to State standards. Rigorous habits and higher-order skills are coherently embedded in academic tasks across grades and subjects.

Impact

Curricular alignment to the State standards results in coherence across grades and subject areas, promoting college and career readiness for all learners through alignment with college-level courses. Rigorous habits and higher-order skills require that all students demonstrate their thinking.

Supporting Evidence

- School leaders and teachers produced curricular documents across content areas aligned to the State standards. Teachers follow a lesson plan structure that results in in coherence across grades and subject areas and includes standards, aims, essential questions, key points, do now, introduction to new material, guided practice, independent practice, differentiation, and checks for understanding. Coherence is evident in curriculum and unit plans that are rooted in College and Career Readiness (CCR) anchor standards for reading. For example, grades six through twelve ELA standards are aligned to CCR anchor standards and organized by categories, such as key ideas and details, craft and structure, integration of knowledge and ideas, range of reading and level of text complexity, and responding to literature. The spiraling of standards is reinforced to support college level courses that students take through Brooklyn College. Standards are strategically aligned across grade levels to build student learning and skills to ensure they are prepared for success in classes beyond high school that occur concurrently at this school.

- A review of curricular documents demonstrates academic tasks that emphasize higher-order skills for all students. A sixth-grade ELA lesson asks students to answer both interpretive and evaluative questions concerning important issues in the article and to make text-to-text and real-life connections. A seventh-grade English lesson asks students to do a Socratic seminar reflection and at the end of each fishbowl session, students gave warm and cool feedback using their notes and the rubric provided. Lesson plans include differentiation for students with Individualized Education Programs (IEPs). Lesson plans across subjects include adjustments and modifications so English Language Learners (ELLs) are able to demonstrate their thinking according to the same high-level standards expected of all students. For example, a ninth-grade math lesson plan includes a diverse learners section with specific students by name and lists refocusing prompts, graphic organizers, and visual aids. Rigorous habits embedded in a coherent way across content curricula also included an emphasis on developing students’ skills in critical thinking, problem solving, and writing that makes connections across disciplines.

- Rigorous habits and higher-order skills are emphasized in lesson plans. Learning objective statements in lesson plans include, from an eighth-grade ELA lesson, “How do we use panel discussions to develop critical thinking and speaking skills by facilitating students’ questions, perspectives, and critique of opposing views?” and from a physics lesson plan, “Design an experimental procedure that can be followed to determine the angle at which a projectile can be fired at to produce its maximum range.” Additionally, students are to connect their discussions and writing to evidence from the text. Lesson plans detail higher-order questions which include, from a social studies lesson plan, “How can we compare Greek democracy to American democracy?” from a ninth-grade math lesson plan, “How do we solve linear inequality in one variable?” and from a tenth-grade global history lesson plan, “How and to what extent have ancient and classical civilizations helped to shape the world today?”
Findings

Across the vast majority of classrooms, teachers use or create assessments, rubrics, and grading policies that are aligned with the school’s curricula and offer a clear portrait of student mastery. School leaders and teachers use benchmark assessments to create a clear picture of student progress toward goals.

Impact

High quality assessment practices provide actionable and meaningful feedback to students and teachers regarding student achievement. Teachers use student assessment data to adjust curricula and instruction and as a result, students demonstrate increased mastery.

Supporting Evidence

- Across the vast majority of classrooms, samples of student work products showed teacher-written actionable and meaningful feedback directing students to the steps they should take to strengthen their work. For example, feedback from a seventh-grade social studies assignment included, “You included key ideas from the documents. Next time, refer to more documents.” During the student meeting, students spoke about the feedback they received from their teachers stating, “The feedback she suggested was to plan out our essay, it really helped me reorganize what I wanted to say and improve my writing overall for this essay and essays after this one.” Another student spoke about feedback received from her teachers, “Every time we get classwork back, every big assignment, projects, essays, homework, the teacher gives feedback on our pattern of mistakes, they also read us our strengths and how you’re improving and they give us some suggestions on how to not only improve that assignment, but make your work better moving forward.”

- The school has grading policies that are determined by departments and are consistent within each major content area. Teachers use rubrics to evaluate student work across subjects and there are specific rubrics across subjects, such as a presentation rubric in Career and Technical Education (CTE) classes, an oral presentation rubric in English, and an expository essay rubric from social studies. Coherence was evident through rubrics reinforcing class discussions across content areas, with categories such as team etiquette, preparation, participation, depth of knowledge, and group dynamics which were aligned to exceeding standard, meeting standard, approaching standard, and below standard. All students at the student meeting confirmed the use of rubrics. One student reported during the student meeting about using rubrics, “We do get to see the rubrics in advance, that way we learn how we can better ourselves.” Standardized grading policies and rubrics offer a clear portrait of student mastery.

- To track student progress and inform instruction, there are schoolwide assessment practices with standards-aligned assessments that provide information at different points of the year about student learning, instructional outcomes, and progress towards goals. Students take a variety of common assessments across a grades and subject areas including baseline, benchmark and end of year assessments. The school follows an assessment calendar which contains periods of time for teachers to design, administer, analyze and respond to student performance data. The middle school ELA team identified word meaning, central idea, and point of view as focus standards and chose students with disabilities and ELL to receive targeted small group instruction support. The middle school math team identified specific standards to focus on, including expressions and equations, ratios and proportional relationships, and the number system. Evidence of increased mastery includes, an increase in students in ELA scoring Level 3 or Level 4 from 69 percent in 2017-2018 to 76 percent in 2018-2019. Mathematics saw increases in mastery from 53 percent of students scoring Level 3 or Level 4 in 2017-2018 to 61 percent in 2018-2019.
Additional Finding

<table>
<thead>
<tr>
<th>Quality Indicator:</th>
<th>4.1 Teacher Support and Supervision</th>
<th>Rating:</th>
<th>Well Developed</th>
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</table>

Findings

School leaders and teacher peers support the development of teachers, including those new to the profession, with the strategic use of observation cycles and accurately capture effective feedback and next steps using the Danielson Framework for Teaching.

Impact

Feedback articulates clear expectations for teacher practice, supports teacher development, and aligns with professional goals for teachers to elevate schoolwide instructional practices and implement strategies that promote professional growth and reflection.

Supporting Evidence

- The strategic use of frequent cycles of classroom observations is evident in both formal and informal observations combined with instructional walks and learning walks. The principal is also scheduled to observe all new teachers during the first round of observations. Subsequently, there are rounds of formal and informal observations focused on norming and calibration as school leaders visit classrooms every two weeks to ensure coherence of observation practices and feedback. Teachers also participate in intervisitations based on individual strengths as well as documented needs as a form of peer support. Teachers who the administration identified as using best practices as evidenced by the Danielson Framework for Teaching are used for intervisitations, where they share pedagogical practices with colleagues. Observation practices implement strategies that promote professional growth for teachers. An observation report from a teacher included feedback on using questioning and discussion techniques and a subsequent observation report included evidence that strategies referenced in the earlier observation report were used by the teacher and the rating increased from effective to highly effective.

- Each rated item on observation reports includes specific language from the Danielson Framework for Teaching rubric, evidence from the classroom observation that supports the rating, as well as actionable next steps. An example of effective feedback regarding professional goals around questioning and discussion includes “While it is always advisable to pose questions that lead to authentic student discussion, this can sometimes lead to the discussion going in various directions. In these cases it is up to the teacher to redirect the discussion so that it falls in line with stated goals and objectives.” The professional goals outlined by teachers during Initial Planning Conferences (IPC) at the beginning of the year are used to guide feedback from school leaders during cycles of observations, both formal and informal. As a result, feedback articulates clear expectations that align with professional goals for teachers.

- Advance observation data is used to determine differentiated professional development (PD). Teacher component ratings are used to develop and design customized PD to support teachers in improving their teaching practice in alignment to the Danielson Framework for Teaching. Specific considerations are given for teachers of students with disabilities and ELLs. Observation data is used to arrange collaborative learning through peer intervisitations. Teachers who are highly effective in specific components are identified to help their colleagues' build instructional knowledge and skills by learning from their successful practices, receiving direct support and encourage reflective teaching practice through peer mentoring. Moreover, the data is used to develop teacher improvement plans, to create individual teacher goals, and to monitor progress toward those goals throughout the year. Observation reports showed evidence of a teacher improving in engaging students in learning from effective to highly effective. As a result, observation practices guide supports for teacher development.
## Additional Finding

| Quality Indicator: 4.2 Teacher Teams and Leadership Development | Rating: Well Developed |

### Findings

The vast majority of teachers are engaged in inquiry-based, structured professional collaborations. Across the school, grade teams meet on a consistent basis to analyze assessment data, student work products, and to share teaching strategies.

### Impact

Collaborations strengthen teacher instructional capacity and promote the implementation of the State standards. Systematic analysis of student data and work products results in the mastery of goals for groups of students.

### Supporting Evidence

- All teachers are engaged in multiple weekly structured teacher team meetings. The overall goal of the high school inquiry team is to raise Regents scores by three percent. During an observed high school inquiry team meeting, teachers across content areas analyzed a student’s work who they all shared in their classes and was strategically identified as one of ten students from the lowest third they would focus their inquiry on this year based upon last year’s Regents data. Individual teachers across content areas presented student work examples and discussed with peers the strengths and areas of growth. Presenting teachers described the student work and spoke about what the student was able to do and what the student had trouble with. The team also reviewed strategies to use that would help the student to improve their work products, such as making the directions more explicit. A teacher shared about how the work of the teacher team has strengthened teacher instructional capacity and promoted State standards saying, “We discuss overarching themes that we are seeing together across all of our classes for the same student and it makes it easier to work together to develop strategies that will not only help the student in our own class, but in all of their classes.”

- Teacher teams follow protocols of looking at student work to analyze student performance data. Grade-level inquiry teams look at student work with an inquiry focus in literacy and math and to develop common grade-level assessments. Subject area teams focus on developing and aligning curricula vertically from grades six through twelve. They look at item analysis from interim assessments before revising content of curricula documents. Teams analyze student performance, specifically focusing on students with disabilities, ELL, students in temporary housing, the lowest third, and young men of color. Curriculum work groups, composed of college and high school faculty from specific subject areas, meet to develop, review, and align curricula. They have created curricula for living environment, chemistry, and writing courses in grades nine through eleven. The work of teacher teams includes looking at classroom practice along with student data. As a result, the work of teacher teams has led to schoolwide instructional coherence that promotes CCR.

- Teacher inquiry teams are focused on looking at students from the lowest third based on assessment results. Evidence of mastery of goals for groups of students, as a result of teacher team inquiry, is evident in course pass rates and increases in credits earned per year. In 2018-2019, 100 percent of students from the lowest third earned at least 10 credits during ninth grade, a 7.1 percent increase from 2017-2018. In 2018-2019, 96.4 percent of students from the lowest third earned at least 10 credits during tenth grade, a 6.4 percent increase from 2017-2018. In 2018-2019, 96.7 percent of students from the lowest third earned at least 10 credits during eleventh grade, a 22.6 percent increase from 2017-2018.