Quality Review Report

2017-2018

High School For Energy And Technology

High school 10X565

2474 Crotona Avenue
Bronx
NY 10458

Principal: Marie Guillaume

Dates of Review:
March 14, 2018 - March 15, 2018

Lead Reviewer: Clarence Williams Jr.
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

High School For Energy And Technology 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>
<th>Area</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>To what extent does the school...</strong></td>
<td></td>
<td></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>
<td>Additional Finding</td>
<td>Proficient</td>
</tr>
<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>
<td>Area of Focus</td>
<td>Proficient</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>Proficient</td>
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</tbody>
</table>
## School Culture

### To what extent does the school...

<table>
<thead>
<tr>
<th>Area</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4</td>
<td>Maintain a culture of mutual trust and positive attitudes that supports the academic and personal growth of students and adults</td>
</tr>
<tr>
<td>3.4</td>
<td>Establish a culture for learning that communicates high expectations to staff, students and families, and provide supports to achieve those expectations</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</td>
<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>
</tr>
<tr>
<td>3.1</td>
<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>
</tr>
<tr>
<td>4.1</td>
<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>
</tr>
<tr>
<td>4.2</td>
<td>Engage in structured professional collaborations on teams using an inquiry approach that promotes shared leadership and focuses on improved student learning</td>
</tr>
<tr>
<td>5.1</td>
<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>
</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 tied to the Danielson *Framework for Teaching* to the entire staff. Administrators effectively communicate expectations that are tied to college and career readiness.

Impact

Teachers have mutual accountability for high expectations set by the principal by providing training and professional development to each other. Parent partnerships that lead to students being college and career ready are successful.

Supporting Evidence

- Teachers demonstrate mutual accountability for high expectations. Those expectations include how to engage students in questioning and rigor in the classroom. This is evident in the professional development plan. Teachers share the accountability of these expectations by providing professional development to their peers. The professional development curriculum overview includes a calendar with a different target for each month and who will be conducting them. For example, in October the professional development revolved around, “Aligning to the Common Core Learning Standards, questioning techniques and using assessments to inform future lessons.” This professional development (PD) was done by teachers and administrators. Teachers follow up by creating a co-planning agenda that supports the professional development. Teachers also have administrators cover their classes so they can see examples of questioning techniques utilized in other classrooms. The success of mutual accountability was seen in a professional development feedback sheet. The teacher stated, “Because of this PD, I am able to create higher depth of knowledge questions to further engage students.”

- Partnerships with parents to support college and career goals have been successful. This is evident, as most parents of students from grade nine to twelve participate in a family night that tells parents about college and career choices and financial aid workshops. This is evident, as ninety-one percent of parents surveyed, stated that the school communicates with them successfully to meet their children’s needs.

- To support college and career initiatives, the school program chair has created an individual graduation plan. The plan informs parents of their child’s progress throughout their high school career. Every student in the building has a plan. A review of a grade twelve student’s plan, showed the students’ credits acquired, the courses they have passed, the ones they need to graduate and the Regents taken up to date. Each student signs that they have received a copy of the plan and parents receive it as well. All parents interviewed were familiar with the plan and stated that it was instrumental in helping plot a course for their child on a college or a career track.
Area of Focus

| Quality Indicator: | 1.2 Pedagogy | Rating: | Proficient |

Findings

Classroom practices reflect how students learn best. Student work products and discussions reflect high levels of thinking and participation. These practices were observed. However, they were not evident in the vast majority of classes.

Impact

Teachers, students and administrators have stated that students learn best by engagement, discussion and student led environments. Although student work results in meaningful work products, they do not take ownership of their learning.

Supporting Evidence

- Students were observed in discussions in a living environment class. During whole-group instruction, students were going over answers from a previous test on allergies. The teacher asked, “Why did the girl have a reaction from the peanuts?” One student stated, “It was an allergic reaction because her immune system overacted.” When the principal asked someone to further clarify, a student stated, “an allergic reaction is the body overreacting to outside factors.” Another student stated, “I agree, it could also be from dust, ragweed and pollen.” Although students were participating, they were reflecting on their answers from their notes and tests they did not take ownership of their learning by providing examples beyond their notes to demonstrate their thinking and understanding.

- To support the belief that students learn best by being actively engaged, students were observed in a global studies class. Students were engaged in accountable talk on the renaissance. The teacher stated that the Renaissance was a turning point. Students were asked to elaborate on how the term relates to the Renaissance. In small groups a student stated, “A turning point is a drastic turn that impacts history.” Another student uses an accountable talk stem stating, “I agree but I would like to add that the Black Plague represented a turning point in history because of the mass deaths.” Another student stated, “I would also like to add that there was a new era for arts and literature which was an additional example of a turning point.” Although students were well engaged, this was not reflected in all classes visited. An example was seen in an algebra class. Students were working on finding the solutions to graphs. The teacher asked the students find the solution to a particular graph. Students solved the problem, however the task required minimal engagement from students without opportunities for discussion or participation.

- The principal has stated that students express themselves in student-led conversations. This was observed in a U.S. History class. Students were discussing slavery. The teacher asked the students the question, “Name a group of people that is making something but not profiting from it.” Students were having discussions among themselves. One student felt that slaves were an example. Another student stated that child labor was another example. An additional student was overheard stating, “I feel children in general is an example because we have very limited rights and we contribute so much to society.” Another student said, “I disagree because we are not forced into labor like other groups have been.” Students were leading the conversation. This was evident as some groups tied the conversation into Manifest Destiny, stating, and “People felt that expansion was their God-given right so they can do whatever they want to other people and feel that it’s their destiny.” Student led conversations were not evident in the vast majority of classes.
**Quality Indicator:** 1.1 Curriculum

**Rating:** Proficient

### Findings

School leaders ensure that curricula are aligned to Common Core and instructional shifts. Curricula also emphasize rigor and higher order thinking skills.

### Impact

Unit and lesson plans demonstrate college and career readiness. Lesson plans use Webb’s Depth of Knowledge (DOK) questions to support higher order thinking skills and rigor for students with disabilities.

### Supporting Evidence

- Most unit plans reviewed, demonstrated the integration of Common Core and instructional shifts. An example was seen in an intensive writing unit plan. To support the instructional shift, citing textual evidence, standards included, determining a central idea and analyzing it and the author’s ideas and sentences. The learning objective supported the standards stating, “The student will be able to cite textual evidence and analyze how the author uses parallel plots, tone, pace, and foreshadowing to create tension.” A teacher stated, “We use the Common Core and instructional shifts to support rigor and to push our students’ thinking.”

- Teachers use Depth of Knowledge questions to support students with disabilities in their lesson plans. In a co-teaching lesson plan, students were provided visuals to answer DOK questions that included, DOK four, extended thinking “What visual aspects of the Mona Lisa make it so engaging?” The lesson plan also demonstrated how students with disabilities will be placed in heterogeneous groups and exposed to DOK questions, such as DOK level three, strategic thinking, “How did da Vinci impact the Renaissance?” and DOK level 1, “Why do we study him today? Why is he relevant?” An additional example was seen in a science unit. Students were challenged with higher-order thinking questions such as, “Explain the difference between mechanical and chemical weathering.” And “How does weather or climate affect weather?” DOK/higher order thinking questions were evident in most units reviewed.

- College and career readiness skills are evident in lesson plans. A business careers lesson plan demonstrates how students will be prepared for college and careers, as outlined in the plan. The objective of the lesson was for students to create a professional logo for a company using all the skills they have mastered. The lesson requires students to use skills that are connected to college and career readiness, such as citing text-based evidence from primary and secondary sources, integrating multiple sources of information from different formats including multimedia formats and doing extensive research on logos and the product. An additional example of college and career readiness was seen in a grade eleven English Language Arts (ELA) lesson. Students were required to conduct research to effectively use information to support a position and develop an argumentative essay. Students were also challenged with using implicit and explicit examples to support their findings. While doing research, students were required to determine the trustworthiness of the websites they were using. During a student interview, a student stated, “The research projects help prepare me for college by getting me used to writing and helping with my college essays.”
Additional Finding

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

Across classrooms, teachers use or create assessments, rubrics, and grading policies that are aligned with the school’s curricula. Teachers’ assessment practices consistently reflect the use of ongoing checks for understanding.

Impact

Teachers use rubrics and student work to provide actionable feedback to students. Teachers use checks for understanding during instruction to make adjustments to the lesson to meet the learning needs of students.

Supporting Evidence

- Teachers use an ELA thematic Regents exam rubric that is aligned to the Common Core. The five-point rubric allows teachers to provide feedback to students in areas of introduction/conclusion, task, facts/examples/details and organization. A sample rubric showed that a student scored a level three in introduction, task, and organization, and a two in facts, examples and details. Feedback to the student included, “Fantastic growth on organizing ideas and concepts into your writing. Nice recall of facts. Need to work on analyzing ideas and connecting to the big picture. Find outside information to help your writing.” An additional rubric showed a student received a level two on analysis. The feedback to the student included, “You need to work on expanding your explanation and why it’s important.” Rubrics were used in most classes and subjects.

- Teachers check for understanding during instruction and modify the lesson based on the needs of the students. An example of this was demonstrated in a living environment class, the teacher was talking about how antigens affect allergies. When they students were asked to provide an example of an antigen, students did not respond. The teacher stopped the lesson to provide examples. Stating, “think of an antigen as a name tag for foreign substance that’s introduced to the body. Can someone think of an antigen that we’ve discussed in class?” a student stated, dust, smoke and pollen.” Another student stated, “We were talking about peanut allergies. The peanut is the foreign substance introduced to the body that caused the allergic reaction, so peanuts must be the antigen.” The teachers stated they were correct and continued with the lesson. These examples of checks for understanding were seen in different classes visited.

- Displayed student work provided examples of actionable feedback from teachers to students that include commendations and next steps. On a posted science quiz, a student received feedback from a teacher that included the following, “Good work providing an abundance of details.” Next steps included, “take a step further by including how this relates to prior knowledge, such as the layers of the earth and how it effects the formation of volcanoes.” An additional example was seen on a student essay on hand transplantation. Feedback included, “Great introduction, very concise. Can you be more specific on the topic covered in class that relates to the article?” Another student received feedback that stated, “Can you expand on this statement to describe the systems and how it works in relation to the article?” Students have stated that their feedback always includes next steps to help them improve. During a student interview students provided additional examples of work products that demonstrated actionable feedback.
Additional Finding

<table>
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<tr>
<th>Quality Indicator:</th>
<th>4.1 Teacher Support and Supervision</th>
<th>Rating:</th>
<th>Proficient</th>
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</table>

Findings

School leaders support the development of new teachers with effective feedback. Feedback to teachers accurately captures strengths, challenges, and next steps using the Danielson *Framework for Teaching*.

Impact

The principal uses informal observations that are tied to the Danielson *Framework for Teaching* to support new teachers. Advance observations and instructional walk-throughs provide teachers with feedback that articulate clear expectations.

Supporting Evidence

- First year teachers are supported by informal observations that capture areas of strength and weaknesses. An example was provided to demonstrate feedback. An informal observation conducted in February demonstrated that the teacher was highly effective in creating an environment of respect and rapport. The teacher was rated developing in using assessments in instruction. Feedback to the teacher included, “classroom interactions between the teacher and the students were highly respectful.” Under assessment, the principal wrote, “The students were not given a list of questions or listening rubric to help them focus.” Recommendations included providing a list of questions for students to ask during presentations, and have some students ask their own questions. The principal gave the teacher a deadline to implement recommendations for a follow up informal observation. New teachers stated that they feel supported by administration and they receive frequent classroom visits to help strengthen their pedagogy.

- Teachers receive feedback from the principal in the form of emails based on instructional walk-throughs. In a sample email, feedback from an observation included, “In the previous visit we discussed leveraging the motivation to create lesson continuity by building activities around a single clear objective and establishing clear closure in the lesson.” The principal also suggested to the teacher that she use a constructive debate protocol as a method to support understanding of the various documents and slides. During a teacher interview, teachers have stated that the correspondence from instructional walk-throughs support classroom initiatives and they welcome the feedback.

- The principal uses the advance rating system to provide feedback to teachers and articulate clear expectations based on those observations. An example was seen in a formal observation from November. The principal cited the teacher as being “developing” in designing coherent instruction. The principal stated, “The lesson design did not include a clear expectation of what the students were expected to accomplish during the class period.” Also, included in the feedback was to use group work to help design instruction. Additional feedback included, “To improve the efficiency and productivity of group work, assign specific roles for the students. An expectation for the teacher was to visit other classes and consult with colleagues.” This was impactful as teachers have stated that administrators cover their classes to allow them to visit their peers to observe best practices.
Additional Finding

| Quality Indicator: | 4.2 Teacher Teams and Leadership Development | Rating: | Proficient |

Findings

Teacher teams consistently analyze assessment data and student work for students they share. Distributed leadership structures are in place so that teachers have built leadership capacity.

Impact

Subject area meetings result in improved teacher practices. Teachers have voices in making key decisions regarding instruction and attendance.

Supporting Evidence

- During the observation of an ELA teacher team meeting, teachers were reviewing English Language Arts and U.S. History Regents exams. They found that on both tests, students had difficulty organizing their ideas. They found that grade eleven students had difficulty with text analysis. Although the team created a graphic organizer, to help students organize their thoughts, they looked at ways to improve on the organizer. Improvements included adding an analytical component that pushes students to paraphrase evidence so they can break it down in their own words. When asked how this meeting has improved the instructional capacity of teachers, a teacher stated, “When we meet as a team, I get ideas from my peers. For example, I've been using the graphic organizers with little success. Now with the additional component, I feel it will speak to the needs of my students.”

- To support distributive leadership in the school and to ensure that teachers' voices are heard, teachers serve as grade leaders. Each grade leader meets with the principal and reinforces initiatives that are discussed at the meetings with their colleagues and share initiatives with the principal. An example, was the initiative of supporting teachers with unofficial observations by the grade level leaders two times per semester, participating in the hiring of new teachers and creating vertical curriculum maps. The latter is impactful, as teachers are now able to articulate student progress from grade to grade and look at the trends in the data. For example, the data showed that students were struggling in history on all grades. As a result, the team organized other meetings to allow the history department to meet with all grades during grade level meetings.

- To support attendance initiatives, a teacher has taken on the role of attendance coordinator. Her role is to head attendance meetings, conduct home visits, generate attendance reports for teachers and plan different interventions for improvement of attendance. An initiative that came from the department was the fifteen-day challenge. This initiative challenges students building wide to have perfect attendance for 15 days. This position came into place because of concerns of student attendance. As a result of the efforts of the coordinator, the number of chronically absent students has decreased by seven percent.