Quality Review Report

2018-2019

Manhattan / Hunter Science High School

High School 03M541

122 Amsterdam Avenue
Manhattan
NY 10023

Principal: Kevin Froner

Dates of Review:
May 15, 2019 - May 16, 2019

Lead Reviewer: Kimberly 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


School Quality Ratings

<table>
<thead>
<tr>
<th>Instructional Core</th>
<th>Area</th>
<th>Rating</th>
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<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 Common Core Learning 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 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>Additional Finding</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>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>
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</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>Area of Celebration</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>Additional Finding</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 schools 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 school-wide 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>Area of Focus</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 the CCLS</td>
<td>Additional Finding</td>
</tr>
</tbody>
</table>
Area of Celebration

| Quality Indicator: | 1.4 Positive Learning Environment | Rating: | Well Developed |

Findings
Structures are in place, such as advisory, so that each student is known well by at least one adult who impacts a student’s academic and personal behavior to ensure that no student is left behind. Student voice is meaningfully embedded in the decision-making and school improvement process.

Impact
The school’s approach to academic and social emotional support results in a safe and inclusive environment where student input led to school improvement. Students’ academic and personal behaviors are positively impacted.

Supporting Evidence

- Ninth and tenth grade students are enrolled in a weekly Advisory class that focuses on college and career readiness. Eleventh grade students are in a SAT/ACT prep course. The advisory curriculum includes topics addressing study skills, goal setting, advocacy and mindfulness. During an observation of an advisory lesson students met in the school’s dedicated mindfulness room for a check-in and breathing exercise before returning to their room for the remainder of the day’s lesson. The staff, students, and parents spoke of the use of the online grading system that indicates the grade and comments for individual assignments but not the final grade. This is done to support student growth and progress versus the final result. Through these structures students are provided the pathway to the development of effective academic and personal behaviors.

- Students spoke of the many opportunities to express their ideas and how the school is preparing them for the demands of college. The start and end time of the school day was an example of an issue students raised to the administration. School leaders asked them to research the pros and cons of the issue and create formal presentations in their advisory class to enable the school community to make an informed decision. During the large group meeting seniors explained that they didn’t understand the reasons for the heavy workload they were given until they attended a college class at the Hunter College campus. They were proud to be one of the few high school students sitting in a college class better prepared to complete the course rather than drop out.

- Students reported there is at least one adult at their school who knows them very well. This is especially so because of their weekly advisory class. Students spoke of open communication between students and adults. Students described how teachers were available during office hours and that common spaces such as the library and computer labs are open during lunch and after school with school staff available to assist. Students enthusiastically shared that their weekly advisory incorporates college readiness skills and mindfulness which helps support them. One of the school’s Assistant Principals is assigned to the campus and is available to meet with students and serve as a liaison between the high school and college. As a result of these structures, students are positively impacted and are prepared for the demands of high school and college.
Area of Focus

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

Findings

The majority of teachers are engaged in structured, inquiry-based professional collaborations that promote achievement of school goals of college readiness and college success and the implementation of the Common Core Learning Standards. Grade level and department teacher teams consistently analyze data and student work for students they share.

Impact

While the majority of teachers are engaged in structured, inquiry-based professional collaborations that promote achievement of school goals and implementation of the Common Core Learning Standards, the work of the teacher teams does not yet impact the instructional capacity of the vast majority of teachers. Teacher teams consistently analyze data and student work for students they share.

Supporting Evidence

- Grade level teams meet together every other week; department teams meet once to twice a month. School leaders also meet with grade level leaders and the Pupil Personnel Team to ascertain what is working well within grade-level teams and to develop action plans containing next steps for the school. Throughout the year grade level teams review both academic and social emotional data. Data is analyzed to measure student progress toward meeting promotion requirements and to plan interventions for students to support them. Grade level meeting notes indicate an action plan for each identified student, and a point person responsible for ensuring there is continued support. While there are structures in place to support inquiry work of teacher teams and there is evidence of strengthened teacher practice in the implementation of school goals, this is not yet evident across the vast majority of teacher teams.

- During an observation of the school’s Pupil Personnel team consisting of grade level leaders, dean, parent coordinator and social worker, members of the team reviewed the most recent grades from the third quarter and identified the three students from each grade level they were most concerned about and reviewed their socio-emotion and academic progress. After reviewing each student’s data, the team reflected on the previous interventions provided, the impact these produced and identified possible next steps. Going forward the team prescribed bi-weekly progress reports, utilization of the Homework Center and incorporating more time-management skills during check-ins during Advisory class. Based on the observation of the team and notes from multiple teams, it is evident that there is consistent analysis of student work and data with increased improvement of teacher practice.

- Across departments, teachers have been working on curriculum development to ensure that students will be ready for the rigors of college classes. For example, teachers in the math department developed a new Analytical Geometry class and the science department is working on incorporating more formal lab reports and scientific writing. History and English Language Arts (ELA) teachers shared an interdisciplinary approach to the senior thesis assignment. Full day retreats provided teachers an opportunity to revise their curriculum, develop a mission and write specific goals for their department. As a result of the focused work being accomplished addressing the gaps between the high school and college curricula, teacher practice is improving in supporting student progress toward the school’s goal of college readiness in three years and college success in four years.
Additional Finding

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

Curricula are aligned to Common Core Learning Standards and strategically integrate the instructional shifts with a focus on close textual analysis in literacy and deep understanding in math. Rigorous habits and higher-order skills are emphasized in academic tasks across grades and subjects, and support college and career readiness.

Impact

Curricular alignment to the Common Core Learning Standards and instructional shifts results in coherence in all subject areas, promoting college and career readiness for all learners. Rigorous habits and higher-order skills require that all students demonstrate their thinking through presentations and discussions.

Supporting Evidence

- Courses, lesson plans, unit plans, and curriculum maps reflect full integration of the instructional shifts and are aligned with the early college standards from the City University of New York. For example, lesson plans in ELA emphasize the value of text-based evidence and close textual analysis. In one ELA unit students are required to write a literary research paper and demonstrate their ability to annotate scholarly sources and determine how to use those resources to defend their claim. This is directly aligned to the shift where arguments must be based on textual evidence. One math task related to deep understanding in math requires students to graph and evaluate linear functions and understand the concept of domain and range. Additionally, they must apply the learning to real world situations such as describing the concept of motion.

- A review of curricular documents demonstrates academic tasks that promote college and career readiness for all students. In one living environment plan students are to write a persuasive letter regarding an issue impacting the environment such as climate change, ozone depletion, or habitat destruction. A senior humanities lesson describes the culminating symposium presentation of their research paper that focused on a topic of their choice. A chemistry lesson plan describes the lab procedure students will follow as they research chemical equilibrium and Le Chatelier’s Principle. Rigorous academic tasks such as these promote college and career readiness and are evident across all content and grade level curricular documents.

- Lesson plans consistently challenge students to utilize rigorous habits in the course of instruction. An example of a learning objective in social studies stated, “Students will be able to engage with higher level text in order to develop a deeper understanding of how the Columbian Encounter transformed the world politically, economically, culturally, and socially. An objective in math read, “Students will be able to manipulate the graph of a function, discover the relationship between the degree of the polynomial and the maximum numbers of roots the function can have, determine the equation of a polynomial function given its graph, and graph a polynomial function given its equation.” Lesson plans detailed high-level questions. In World History, one question asked students to explain the motives for the European age of exploration while in math a question centered on how to simplify rational functions to identify its domain. Plans are differentiated and address all students’ needs. Lessons for students with disabilities include the use of technology, modeled responses, graphic organizers, the previewing of content and academic vocabulary, and the use of visuals and graphics.
Additional Finding

<table>
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<tr>
<th>Quality Indicator:</th>
<th>1.2 Pedagogy</th>
<th>Rating:</th>
<th>Well Developed</th>
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Findings

Teaching practices across the vast majority of classes reflect school beliefs that students learn best in a collaborative environment that supports student voice. Student work products demonstrate high levels of participation and ownership across content areas and grade levels.

Impact

Teaching practices that reflect school beliefs students learn best such as group work and peer feedback are evident in the vast majority of classrooms. Student work products and discussions reflect high levels of student thinking, participation, and ownership throughout their discussions and presentations.

Supporting Evidence

- Across the vast majority of classrooms, there is evidence of student ownership of their learning during group work and class discussions. During a ninth-grade global studies lesson, students prepared for a Socratic seminar on the Columbian Encounter by first individually annotating their assigned pages from the text, completing a note catcher and then receiving peer feedback on their notes. The lesson then transitioned to the whole class seminar where students shared their responses, asked clarifying questions, and responded to the arguments presented by other students while they made specific references to their notes or passages in the text. In an art history lesson, students discussed the work of a contemporary New York City artist and his use of local materials. They then took turns presenting an item they found and how it is inspiring them to create their own piece of art. As each student presented, other students in the class asked clarifying and connecting questions of the presenters to help them consider how to best approach their assignment. In the vast majority of classrooms, teaching practices such as these reflect the coherent belief that students learn best through a collaborative environment that encourages and develops student discourse and voice.

- In an Analytical Geometry class, students worked with partners and in small groups to create different polynomials of varying degrees and drew graphs that showed the maximum number of times each function can cross the x-axis. Students discussed their graphs and presented their findings with the other students in the group who asked questions and provided feedback. Students shared that the purpose of the lesson was to understand the degrees of a polynomial resulting in their demonstrating high levels of participation and ownership of their learning.

- In a tenth-grade ELA class, the writing workshop lesson focused on students providing peer-to-peer feedback on the thesis for their literacy research paper. During the workshop, students exchanged their drafts with another student who provided written feedback using the language of the rubric for the assignment. Highlighters were used to identify the required elements, including the delivery of a risk-taking idea about the author’s purpose, and the exploration of an interesting and substantive claim regarding the research topic. After first reading and providing feedback, students then had a discussion with their partner about their feedback and often suggested how to best revise their thesis statement. Students in an eleventh-grade ELA class prepared for their final presentation assignment by observing a model student presentation from a former student and used the language of the rubric to discuss the strategies employed by the student presenter. Student voice and high levels of this type of student engagement is evident across the vast majority of classrooms.
### Additional Finding

#### Quality Indicator:

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<tr>
<th>2.2 Assessment</th>
<th>Rating:</th>
<th>Proficient</th>
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#### Findings

Across classrooms, teachers use assessments, rubrics and combined school and college grading policies. These assessments are employed to determine student progress toward goals across grades and content areas.

#### Impact

Students are supported in their academic progress through actionable feedback and the teachers’ use of assessment results to adjust curricula and instruction.

#### Supporting Evidence

- An examination of rubrics indicates alignment with the school’s instructional focus addressing of preparing students for college success. A rubric is used in a Humanities class to evaluate the senior thesis project focuses on the statement of the problem and topic, the development of research questions, the literature review, findings, recommendations and conclusions. A science lab rubric outlines the expected criteria including the background information, problem question, controlling variables, materials, diagram, procedure, calculation, data table, lab drawings, the processing of raw data, and drawing conclusions and evaluation of the data. Consequently, the use of these tasks specific rubrics supports students in their academic progress towards achieving their goals across grade levels and content areas.

- There is evidence of specific teacher and student feedback on the majority of student work. One example of teacher feedback states, “Your group demonstrated a thorough understanding of the task. However, your group did not plot one of the key points in your graphs. Great use of visuals and colors to distinguish your functions.” One example of student feedback states, “Mold the purpose and research topic together. Be specific about what type of epithets. Overall, you need to shorten this. Make it three sentences.” During the student interview, students shared that in most of their classrooms, they received written feedback on their assignments from both teachers and peers and they felt prepared for the classes they are taking at the college during their senior year. As a result of specific feedback from teachers and peers, students are supported in the school’s focus of being college ready in three years and college successful in four years.

- The school handbook provides evidence of the school’s grading policy that is communicated to staff, students, and parents. The grading policy is accessible to students and parents through the school’s online grading system. Teachers are expected to update grades on a regular basis and each department determines its specific grading policy within the ranges of the schoolwide and college policy. A semester based grading model is used where the final semester grade is the average of the grades from the first two quarters. Staff, students, and parents all referred to the schoolwide meetings that took place to revise the grading policy and the decision to show grades and comments for individual assignments but not the final grade. They explained the reason for this was to support students in their progress and not the final result in a course. Common teacher-developed assessments and standardized assessments used to measure student progress and analyzed during grade level and department meetings include Advanced Placement (AP) SAT, ACT, Regents, senior year thesis, midterms, and finals. As a result of a grading policy that incorporates high school and college requirements and the multiple assessment measures used, adjustments have been made to the curricula to support student learning.
Findings
School leaders consistently communicate high expectations specifically centered on having students college ready in three years and college successful in four years. School leaders and staff effectively communicate expectations for a path to college and career readiness to families.

Impact
Communication and professional development focused on high expectations results in a culture of mutual accountability. Partnerships with families support students in their progress toward college and career readiness.

Supporting Evidence

- Frequent classroom observations provide feedback utilizing the Danielson Framework for Teaching as the standard for professionalism and quality instruction. Observation reports include specific language from the rubric, and evidence from the classroom observation that supports the rating along with actionable next steps so that teachers clearly understand expectations. Those expectations are communicated and supported through the staff handbook and professional development offerings. School leaders consistently stress that students need to be college ready in three years and college successful in four. For example, teachers are asked to include additional research assignments across content areas and provide added opportunities for student discourse and critical thinking through discussion and presentations. As a result of the specific, actionable feedback and pertinent professional learning sessions, teachers are supported in meeting the school’s expectations.

- School leaders consistently communicate the school’s core values that state, “We never give up on a student, we prepare all students for college readiness and success, we appreciate, respect and embrace our school’s cultural diversity, we support and encourage rich and meaningful after-school experiences and our school is a community where every staff member, student and family has a voice.” Posters of the school’s mission and core values are posted in classrooms, hallways and offices and referred to by school leaders, teachers and students. Teachers are expected to provide a course syllabus at the beginning of the year that outlines expectations for students, teacher and parents and states the class grading policy. Through clear and frequent communication, staff understands the high expectations of school leaders.

- Students who attend the school spend the first three years completing the majority of their high school requirements before spending their senior year at the Hunter College campus to take a combination of high school and college classes. Parents spoke of the partnership they had with the school and specifically referenced the early college and advisory program. Information is provided to parents regarding the college application process and applying for financial aid through meetings and workshops. School leaders attend PTA and School Leadership Team meetings and inform parents of the progress the school is making toward the school’s goals. Parents spoke positively of the availability of the principal and the regular updates they receive through emails, phone calls, and the online grading system. Additionally, parents are included in the goal setting and improvement process underscoring the successful partnership that exists between the school and families. This positive relationship leads to the high achievement outcomes evidenced in the school data.