Department of Education
Carmen Fariña, Chancellor

Quality Review Report

2016-2017

Thomas A. Edison Career and Technical Education High School

High school 28Q620

165-65 84th Ave.
Queens
NY 11432

Principal: Moses Ojeda

Dates of Review:
May 24, 2017 - May 25, 2017

Lead Reviewer: AJ Hepworth

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

Thomas A. Edison Career and Technical Education High School 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

Instructional Core		
To what extent does the school...	**Area**	**Rating**
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	**Additional Finding**	**Proficient**
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	**Additional Finding**	**Proficient**
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	**Area of Focus**	**Proficient**

School Quality Ratings continued

School Culture

To what extent does the school...	Area	Rating
1.4 Maintain a culture of mutual trust and positive attitudes that supports the academic and personal growth of students and adults	**Area of Celebration**	**Well Developed**
3.4 Establish a culture for learning that communicates high expectations to staff, students and families, and provide supports to achieve those expectations	**Additional Finding**	**Well Developed**

Systems for Improvement

To what extent does the school...	Area	Rating
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	**Additional Finding**	**Well Developed**
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	**Additional Finding**	**Well Developed**
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	**Additional Finding**	**Proficient**
4.2 Engage in structured professional collaborations on teams using an inquiry approach that promotes shared leadership and focuses on improved student learning	**Additional Finding**	**Proficient**
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	**Additional Finding**	**Well Developed**

Area of Celebration

Quality Indicator:	1.4 Positive Learning Environment	Rating:	Well Developed

Findings

The school's approach to culture building, discipline, and social emotional support is informed by partnerships, building initiatives, and periods for students to be supported both academically and emotionally by mentors and their peers.

Impact

A safe environment and inclusive culture exists for all which supports progress towards the school goals and allows for meaningful student voice in decisions, leading to school improvement. Additionally, each student is known by at least one adult who helps personalize supports that impact his/her academic and personal behaviors.

Supporting Evidence

- A safe and inclusive school culture is supported by choices the staff makes through the outcomes of several committees. The crisis team that meets monthly is composed of a variety of school community members. Members present scenarios to help develop building-level responses to current issues that are challenging the school, such as suicide, social media, and bullying. An outcome of those meetings is explicit trainings of all staff, including discussions and feedback regarding how to build and develop strategic plans to ensure preventing crises before they occur. The building response team and instructional support staff play an integral role in the handling of any crisis in a timely manner and they work towards helping the entire student. Students expect the teachers and school leaders to walk in and out of classrooms during instruction and overwhelmingly believe the communication from teachers is positive. Additionally, students themselves agree that "Edison is not sexist or racist and open for all."

- About 20 students from across grades are selected to participate on a student-input committee that is involved in shared decision making. One outcome of their work is the Actively Caring at Edison (ACE) initiative where students are encouraged to do acts of kindness, nurture, and demonstrate caring to one another. A crafted tree in the school lobby highlights many of the acts of kindness. Additionally, a leadership academy comprised of seniors is selected to support freshman, both academically and socially. The selected seniors go through an extensive multi-night off-site summer training program to be qualified for the program. Freshman students feel the program helps them with advice, stress, and personal connections.

- Several partnerships and initiatives with outside organizations and school-based personnel focus on ensuring that the school community provides counseling and support for students' development of academic and personal growth. For example, Operation Graduation targets students who are identified as being off track and provides individual supports to get them back on track. Students meet regularly with a guidance advisor and are scheduled for additional support classes. Currently, 70 percent of Operation Graduation students are demonstrating satisfactory improvement in the areas of attendance, credit accumulation, passing classes, and are slated for a timely graduation. Additionally, a full time work-based learning coordinator supports student's development with academic success through providing course offerings intended to teach skills vital for successful learning and work place performance.

Quality Indicator:	2.2 Assessment	Rating:	Proficient

Findings

Across classrooms, teachers focus on the assessment and feedback structures that are aligned with the school's curricula, rubrics, and benchmark measures to determine student progress.

Impact

Assessment results allow for actionable feedback, tracking of student progress, and are used by teachers to adjust curricula and instruction, although they may not yet yield mastery for all students.

Supporting Evidence

- Teachers provide actionable feedback to students on a variety of assignments and performance tasks aligned with each course's curricula. However, feedback does not consistently provide meaningful information relative to student achievement. For example, in English Language Arts (ELA) teachers assess student understanding using an exit ticket with a four-point rubric. Students are able to understand based on the feedback if their work provided evidence of their understanding or if they require more assistance; however, the information is not always specific as to what needs to be adjusted for an improved submission. Similarly, a student-generated color wheel with images and colors included a unique layout based on teacher input. However, despite the student conferring with the teacher prior to submission, he lacked clarity why his grade did not reflect the highest level of proficiency according to the feedback received. In a Career and Technical Education (CTE) collision and refinishing class, the teacher provided actionable and meaningful feedback to students and referred to their procedural manuals used in the prior day's lesson to inform students of their progress. As such, students in the CTE class were able to fully explain the steps required to demonstrate the learning objective of removing a car door.

- Results from benchmark assessments are tracked to inform decisions around adjustments to curricular planning and instruction. Additionally, assessment results are captured using a digital photographic platform integrated with mobile devices in live time across a variety of courses and the results are used to adjust instruction and curricula. For example, Lexile levels guide lesson planning of purposeful differentiated reading tasks for students with disabilities reading of Shakespeare. Some students are provided modified versions of the text while others are provided the original text to challenge their thinking and engagement. Similarly in science, commonly administered pre-assessments using Regents exam questions are used to guide instruction and target specific skills within each unit. However, results do not yet demonstrate growth towards mastery by all learners, although overall Regents results have shown improvement.

- In discussing the feedback they receive on their work, most students were able to articulate next steps for improvement, particularly as it related to comments on their writing samples. Students generally felt the feedback, especially from in-class conferences, allowed them to be more thoughtful, clear, and organized although their revised work often reflected the suggestions, mastery was still not achieved. One senior shared a reflective and high quality completed work sample used for a Model UN delegation conference while another student shared a similar sample of work with actionable feedback that was inconsistently aligned with the graded rubric.

Additional Finding

Quality Indicator:	1.1 Curriculum	Rating:	Proficient

Findings

Curricular documents and problem-based learning experiences are designed by teachers using an interdisciplinary approach to align with the Common Core Learning Standards and to promote rigorous habits and higher-order skills.

Impact

College and career readiness skills are promoted across courses and core content areas, and documents reflect planning for a diversity of learners.

Supporting Evidence

- Problem Based Learning (PBL) tasks that are developed across subjects require students to demonstrate key knowledge, understanding, and success in college and career readiness skills, aligned with the Common Core Learning Standards. Teachers from a variety of grades and content areas collaborate in the design of the PBL's. A computer forensics unit is designed so students will explore the act of recovering personal data from devices such as a USB drive or cell phone and they debate the constitutionality and possible violations of personal liberties. Furthermore, students use the scientific method to design and explain approaches to recover the erased data and use mathematical concepts throughout the task. After analyzing their research, students defend their position in an argumentative essay and reflect on their work with peers by editing and providing feedback, leading up to a group presentation. Similar PBL projects are experienced by students across other core content classes and Career & Technical Education (CTE) classes. For example, in geometry, students are expected to construct a truss bridge made out of Popsicle sticks as a way of showing an understanding of the rules of triangle congruence.

- Although lesson plans are developed individually by teachers with criteria for instruction and assessment, the level of higher-order skills emphasized is not embedded coherently across grades and subjects so that all students have to demonstrate their thinking. A post-assessment from an Advanced Placement (AP) lesson aimed at having students use graph theory to analyze a graph and determine if an Euler Path exists. It included a question worksheet, a supplemental PowerPoint and a reference sheet to assist with engaging students in the task. Similarly, an advanced algebra lesson plan strategically grouped students to breakdown model equations and explain why each step is essential when writing the equation of a quadratic given the sum and product. However, in some planned lessons the experiences for students are limited to reviewing for end-of-year summative assessments and incorporated uneven scaffolds, thus limiting students, especially those with disabilities, from having to demonstrate their thinking.

- Via an interdisciplinary approach, teachers emphasize using informational and text reading across the content areas and the vast majority of lesson planning documents include text that needs to be analyzed or written about with some form of reflection. The lesson plan for a pre-calculus class includes writing an essay on "How can I use pre-calculus in my shop class?" An ELA lesson plan includes a variety of poems for students to interpret imagery, language use, and structure, while making connections to World War I.

Quality Indicator:	**1.2 Pedagogy**	**Rating:**	**Proficient**

Findings

Across classrooms, teaching practices are aligned to the curricula and reflect a set of adopted instructional priorities about how students learn best as observed in student work products and purposeful small group discussions.

Impact

Students produce meaningful work products and exhibit high levels of student thinking and participation, although there is a lack of demonstrating student ownership across classes.

Supporting Evidence

- Real-life connections between content and skills are made by students in most classes, further engaging them in their studies, thus supporting alignment with the Danielson *Framework for Teaching*. In a CTE medical assistance class, working at four different stations, students actively demonstrated skills common to medical assistants, following directions, and referring to a cheat sheet when necessary. Students also critiqued each other's work and recorded written reflections. Students in a visual design class worked independently on computers with a vector image to demonstrate editing and manipulation of images mirroring the skills demonstrated by illustrators in computer animation or advertisement. Students with disabilities in an Integrated Co-Teaching (ICT) math class created bar graphs of items they surveyed about what staff favored for their lunch. With partners and support from paraprofessionals, the students drew a histogram with single unit scales to represent the data set with up to four categories. Additionally, they self-assessed their work using a checklist.

- Across all classes, students are provided opportunities to engage in classroom discussions and share their thinking with one another, reflecting consistently high levels of student thinking and participation. When sharing out the meaning of an interpreted poem, one girl in an honors ELA class stated, based on the first stanza, "I think we can all relate to the poem." She further made a personal connection based on her home life, while another student made connections to ancient Rome. While preparing for the final exam, students, working in pairs, in a forensics class created higher-order thinking questions to assess each other's knowledge of the content and they discussed their answers with thorough and detailed explanations. Additionally, while watching a video on pregnancy in the womb, students in a health class clarified and discussed their understanding on the stages of pregnancy and labor guided by teacher-led pertinent questions as she frequently paused the video.

- Quality work products are generated by most students when they are purposefully grouped and directed to work with partners to complete a task, especially throughout most CTE courses. While working in designated groups, students in a collision and refinishing program collaborated on removing a door from one of three cars. All students dressed in their uniform according to class expectations and used a manual for assistance when necessary. Throughout the lesson, the teacher engaged in asking questions requiring the students to justify their actions. Most students developed a logical explanation with evidence to demonstrate their thinking.

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Additional Finding

Quality Indicator:	3.4 High Expectations	Rating:	Well Developed

Findings

School leaders consistently communicate high expectations regarding professionalism, the building of school culture, and pedagogy to the entire staff. Teacher teams and staff establish a culture of learning that consistently communicates high expectations to all students.

Impact

School leaders have established systems that support mutual accountability regarding high expectations for teachers. Additionally, ongoing and detailed feedback through the work of guidance counselors, the college advisor, and additional staff, is provided to students to prepare them for college or career beyond high school.

Supporting Evidence

- Communications are regularly provided to staff outlining expectations for instructional delivery, curriculum resource development, and protocols for looking at student work. The expectations result in the creation of an elevated sense of accountability between constituents, as evidenced by   a member each month being recognized for contributions to the school community, for support of lesson planning, and student achievement highlights around the school on bulletin boards. Additionally, staff frequently update their bulletin boards inside and outside their classrooms with current student work and use a schoolwide recommended template as guidance. Included with the students' work samples, is a description of the assignment, the learning standards addressed within the student work product, rubrics, teacher/student feedback, course name, date, and grade level.

- A clear set of expectations regarding the instructional foci are communicated to staff. Teachers spearheaded and they all completed a professional development survey relative to their preference of conducting voluntary workshops in the areas of pedagogy and curricula. The results of the survey assist in guiding professional development sessions. Additionally, teachers are provided structures regarding intervisitations that are planned to support their professional growth and training on "What must a lesson always have?" Teachers and building leaders agreed that all lessons must have several key attributes, including an aim, objectives, do now, mini-task, differentiation strategies, interdisciplinary skills, twenty-first century skills, and assessment in alignment with the Danielson *Framework for Teaching's* planning and preparation domain. Through the trainings and teacher teams, teachers hold themselves accountable.

- Guidance counselors meet with students and their families regularly to provide updates on academic success and provide personalized attention for students. Students also receive graduation trackers from their guidance counselor and are aware of their progress towards credit accumulation. In addition to the guidance counselor, a college advisor supports students by discussing personal and academic struggles connected to their individual needs. Students expressed that beginning in grade nine, several school initiatives support their preparation for college, including the offering of tutorial sessions, registration for the SAT's at no cost, and programming many AP and college credit bearing classes.

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

Findings

The majority of teachers are engaged in structured, inquiry-based professional collaborations during common planning time meetings where there are opportunities for ideas to generate in support of their professional growth. Teachers contribute to decisions that positively impact all aspects of the school community.

Impact

Inquiry collaborations led by teachers have strengthened their instructional capacity and the promotion of school goals, while distributed leadership opportunities have provided teachers a voice in key decisions that affect student learning and school culture.

Supporting Evidence

- Teachers from various grades and content areas meet regularly during collaborative common planning time to discuss student work and identify instructional strategies and best practices, to improve their pedagogy, and develop tasks, leading to changes in content and sequencing of curriculum. A math teacher who piloted a program in which student work products that were analyzed demonstrated improved student achievement, relative to classes that did not pilot the program. The piloted program yielded nearly twice the proficiency level for his respective students' achievement, thus influencing immediate and future decisions regarding how Common Core Learning Standards and instructional shifts in math are taught across the grade.

- Teachers use an inquiry approach for looking at student work to identify five to seven major misconceptions and then design next steps to redirect instruction and clarify those shortcomings. For example, in geometry, teachers concluded a possible cause for the discrepancy between the correct answer and the most frequently chosen response was the application of an incorrect formula. As such, teachers developed purposeful do now activities, additional homework assignments, and a map project on the laws of sine and cosine. The review of minutes from a collaborative common planning document from the ELA department highlighted similar inquiry protocols leading to the identification of areas in which students needed to improve, including literary elements and central idea/theme.

- Teachers often suggest ideas for events and support structures that would contribute to their own professionalism, student learning, and culture building. Serving in a multitude of positions, staff wear a variety of hats and contributes to furthering the mission of the high school, including unique approaches to addressing increasing attendance. A teacher input committee exists for teachers to share their ideas, experiences, and contribute to shared decision making. Recent discussions reflected changes suggested by staff related to how daily attendance is taken. A proposal and decision to track attendance by moving it from period three to another period has contributed to increased attendance rates. Teachers have also spearheaded the initiative to use Google Docs for curriculum planning and to bring a focus on PBL.