Quality Review Report

2013-2014

Pathways in Technology Early College High School (P-Tech)

High school 122

150 ALBANY AVENUE
BROOKLYN
NY,11213

Principal: Rashid Davis

Dates of review: Dec 11 - 12, 2013

Lead Reviewer: Rod Bowen

Part 1: The school context

Information about the school

Pathways in Technology Early College High School (P-Tech) is a High school with 226 students from grade 9 through grade 14. The school population comprises 85.0% Black, 10.6% Hispanic, 0.9% White, and 3.5% Asian students. The student body includes 1.8% English language learners and 10.2% special education students. Boys account for 75.7% of the students enrolled and girls account for 24.3%. The average attendance rate for the school year 2012 - 2013 was 93.2%.

Overall Evaluation

This school is proficient.

Part 2: Overview

What the school does well

- The school has established clear, focused data-based goals, that are tracked systematically and progress is regularly communicated with all constituents. (3.1)

    - The school, which was founded upon the goal of graduating 100% of its students with an associate degree within 6 years, is committed to getting as many students college ready as early in their high school career as possible so that they can immediately begin college level coursework. Students must successfully complete Algebra 1 and 2, and Geometry, as these classes are the "gateways" to the college-level math courses that lead students toward the two associate degrees. To this end, the City University of New York (CUNY), one of its institutional partners, has provided a research based college readiness metric whereby students must pass the New York State (NYS) English language arts (ELA) Regents exam with a minimum score of 75 and a math Regents exam with a minimum score of 80. While the goals are steadfast, what is fluid is the action planning regarding how best to get students to meet the goals as early as possible. The Comprehensive Education Plan (CEP) has two specific goals to drive the work, to increase the percentage of students meeting one or more college readiness metrics after one year of high school by 15%, and to increase the percentage of year one students meeting one or more college readiness metrics by the end of year two by 15%. Data from mock Regents exams, scholarship reports, and actual Regents exams are used to systematically track progress toward meeting these goals. Having such clear and meaningful goals that are informed by a college readiness inspired theory of action is resulting in academic acceleration and achievement for students.

    - The leadership of the school works in complete accord with CUNY, New York City College of Technology (City Tech) and International Business Machines (IBM) to establish school goals and its accompanying benchmarks. In addition, it constantly communicates progress and adjustments to action plans to all of its constituents. Teachers, parents, and students, were all able to speak to the school goals and reference the establishment of math-based academies as an initiative started this year to differentiate student programming. A parent, who is a member of the School Leadership Team (SLT) noted that the principal consistently communicates, "Where we are so far in terms of school goals: attendance, requirements for math, and Regents completion," at their monthly meetings. An officer of the parent association (PA) noted that based on their understanding of what the school needs, the PA is motivated to aggressively fund-raise to assist the school in meeting its goals. The collaborative and inclusive means of establishing and communicating school goals and progress toward them has resulted in all members of the school community having investment in and a level of ownership of the school's direction.

- The highly effective coordination of resources supports the school's mission, instructional goals, as well as student needs, as evidenced by increased student achievement. (1.3)

    - Partnership is key to the school's ability to actualize its mission as evidenced by the college readiness benchmarks provided by CUNY that have directly impacted hiring, curriculum development, and student programming. Additionally, IBM offers a backward designed skills map that outlines competencies students will need to be successful in industry. These skills are aligned to those needed to complete the two associate degrees granted by City Tech. A steering committee that includes representation from the Office of Post-Secondary Readiness (OPSR), City Tech, CUNY, IBM, the principal, and teaching staff, oversees the scope and sequence of the skills maps. Furthermore, the school purposefully allocates money for technology. The school has six laptop carts and four computer lab rooms, one specifically dedicated for a virtual enterprise program. All teachers and students have access to Smartboards and graphing calculators, and an iZone platform is used to upload lessons. All students are provided with a PTECH email address and electronic folder system for student work. Parents and students have access to TeacherEase, which is used for non-college courses to track student progress online. Achieve3000 is in place as another means of differentiated online academic skills acquisition. Human capital is highly valued at the school. Given the college readiness metric and the need to accelerate student performance in ELA and math, the school frontloaded its hiring around those two subject areas. Students' programs contain 10 periods each day, 90 minute blocks of ELA and math daily, and students sit for Regents at the end of year one. This progressive model of having a robust ELA and math staffing in year one and two, and folding in social studies and science starting in year two allows room for college professors to begin teaching students in year two who are ready. One hundred percent of staff also teach six weeks during the summer. This year round model makes it possible for students to complete all high school graduation requirements in three years. This strategic use of resources are aligned to the school's overall vision and mission and results in students beginning course work for their associate degree as early as their second year of high school.

- High expectations are consistently communicated to all school stakeholders to clarify students' path to college and career readiness. (3.4)

    - Given the scope and sequence of professional skills as informed by IBM and City Tech, the college readiness metrics provided by CUNY, and the goal of earning an associate degree in 6 years, the entire P-TECH community is driven by high expectations. Students are told to see themselves as college students from the moment they walk in as first year students. This is validated, as many begin to successfully complete college level courses in their second year and are provided with CUNY course transcripts. The school and its partners have created a "trunk" of courses for each of the associate degrees. They include speech, black theatre, English Composition 1, and English Composition 2. Parents noted, "P-TECH challenges our children to go way beyond what's expected" and "They won't just get a degree, they'll get skills. This school represents opportunity." When speaking of their experiences, students

claimed, “They want us to pass an eleventh grade test in ninth grade. None of my friends who don’t go here are doing that,” and “At P-TECH, you can’t do your best. There is no best. There’s only better.” Every student is assigned an IBM employee that serves as a mentor. These mentors work to guide students’ understanding of what it means to be professionals. The exposure to college and professional experiences while still in high school results in clarifying the path to college and careers as well as the infusion of high expectations throughout the school.

- The professional development, learning experiences, family investment, and structures that are in place cultivate students’ academic and personal behaviors. (1.4)

    - The principal is committed to keeping a student to adult ratio of 10:1 to ensure that all students are known and nurtured throughout their four to six years at P-TECH. The guidance counselor, community coordinator, parent coordinator, secretary, business manager, and assistant principal who deals with behavioral referrals, are a first line of defense on-site when addressing the needs of students who make poor choices. The parent coordinator does home visits and coordinates efforts when the school needs to get a parent on the phone right away (lateness, issues, etc.). In the past, the school has had a guidance intern and it plans to continue this practice starting in January. Additionally, coaches, as the one for the track team, and those on staff for different sports, add another layer of relationships with students. The principal, who is credited for bringing competitive sports to the campus, strongly believes that providing students with constructive athletic outlets supports academic achievement and character building. Parents spoke of their children’s maturation as a result of being on the track team, specifically noted were their children’s growth in being disciplined as well as looking out for others. Also peer mediators trained by the Commission of Human Rights work to resolve peer-to-peer conflict when needed. This thoughtful coordination of staff works to address the social, emotional and behavioral needs of students.

    - Parents claimed that communication between themselves and the school is excellent. Teachers consistently respond to and initiate correspondences as needed to keep parents abreast of the needs of their children. City Tech professors meet with the high school ELA and math teachers regularly to ensure that there is vertical alignment in expectations and academic outputs so that students are ready for the college level courses. IBM mentors bring students to IBM facilities so that they can witness the professional environment and behaviors to which they aspire. Such experiences for both students and teachers work to instill the necessary academic and professional behaviors in all students.

What the school needs to improve

- Build on the instructional practices that reflect a shared set of pedagogical beliefs to create more opportunities for high levels of student thinking and engagement across the vast majority of classes. (1.2)

- The principal named a few clear pedagogical practices that capture the school's beliefs in how students learn best. They include: peer-to-peer interaction where students are positioned to teach each other, multiple entry points, and questioning and discussion. Though not named, another clear belief is making the teaching of content and skills relevant and applicable to the real world. A ninth grade Integrated Co-Teaching (ICT) ELA class was conducting a mock trial based on the novel Of Mice and Men. In the trial of Lennie Smalls, students were divided into the prosecution, the defense, and the jury. In a Geometry class, students were researching and calculating the depreciation curve of a new car of their choice. In eight of the nine classes visited, there was intentional student-to-student engagement. However, questioning, though present, was not practiced at a high level across the vast majority of classrooms. For example, in the technology class, questions were relegated to low-level process based questions such as, "Why would we enter the number here?" Such inconsistencies with higher order questioning hinder students from making broader connections between their classroom effort and real world applications.

- Across classrooms, students participated in the lessons being taught, but they were not always engaged in the rigorous thinking that was possible given the tasks. For example, in the Geometry class, though all students assigned the task of calculating the depreciation curve for a new vehicle, not one of the six students asked could give a clear definition of what a depreciation curve meant or represented. In the class engaged in the mock trial, those in the jury, approximately a third of the class, were not pushed to interpret what was occurring in front of them and were allowed to be passive viewers. Though rigor is embedded in the design of such activities, the execution of learning experiences is not leveraging high levels of student thinking across that vast majority of classrooms.

- Improve assessment practices that consistently result in effective instructional adjustments and increased student awareness of their next learning steps. (2.2)

  - Much of the work posted on bullet boards, as well as the work that students brought to represent their efforts as learners, did not contain clear feedback that offered next steps for improvement. Both ELA classes visited had bulletin boards where students only received checks and check pluses at the top of their work. However, the Geometry class contained work on display that had feedback such as, "Great connections. I would like to see some examples of your calculations." When students showed samples of their work, there was virtually no qualitative feedback. A student showed a pre-calculus assignment that had green slashes across each task. When asked what the slash meant, if it was done correctly, incorrectly or simply done, the student said that he had no idea. Similarly, a student with an Individualized Education Program (IEP) could not articulate what he'd need to do differently based on the x's that were placed incorrect items on his test. Such inconsistencies in how students receive actionable feedback, result in students having little ownership of their learning and no clear sense of how to improve.

  - During classroom visits, it was observed that though most teachers ask questions of the class to assess understanding, some even cold calling,

there was little evidence of thoughtful checks for understanding that assess the class as a whole. In five of the nine classes visited, teachers circulated to support students during group or independent work as needed. However, there was little evidence of teachers creating opportunities to make adjustments during instruction to address a common misunderstanding. This lack of consistency and depth in checking for understanding does not allow teachers to make the in the moment adjustments needed to ensure class wide understanding.

Part 3: School Quality Criteria 2013-2014

School name: Pathways in Technology Early College High School	UD	D	P	WD
Overall QR Score			X	

Instructional Core

To what extent does the school regularly…	UD	D	P	WD
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?			X	
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?			X	
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?		X		

School Culture

To what extent does the school …	UD	D	P	WD
1.4 Maintain a culture of mutual trust and positive attitudes that supports the academic and personal growth of students and adults?				X
3.4 Establish a culture for learning that communicates high expectations to staff, students and families, and provide supports to achieve those expectations?				X

Systems for Improvement

To what extent does the school …	UD	D	P	WD
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?				X
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?				X
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?			X	
4.2 Engage in structured professional collaborations on teams using an inquiry approach that promotes shared leadership and focuses on improved student learning?			X	
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?			X	

Quality Review Scoring Key

UD	Underdeveloped	D	Developing	P	Proficient	WD	Well Developed