



## Part I – Eligibility Certification

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The signatures on the first page of this application (cover page) certify that each of the statements below, concerning the school’s eligibility and compliance with U.S. Department of Education and National Blue Ribbon Schools requirements, are true and correct.

1. All nominated public schools must meet the state’s performance targets in reading (or English language arts) and mathematics and other academic indicators (i.e., attendance rate and graduation rate), for the all students group, including having participation rates of at least 95 percent using the most recent accountability results available for nomination.
2. To meet final eligibility, all nominated public schools must be certified by states prior to September 2019 in order to meet all eligibility requirements. Any status appeals must be resolved at least two weeks before the awards ceremony for the school to receive the award.
3. The school configuration includes one or more of grades K-12. Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.
4. The school has been in existence for five full years, that is, from at least September 2013 and each tested grade must have been part of the school for the past three years.
5. The nominated school has not received the National Blue Ribbon Schools award in the past five years: 2014, 2015, 2016, 2017, or 2018.
6. The nominated school has no history of testing irregularities, nor have charges of irregularities been brought against the school at the time of nomination. If irregularities are later discovered and proven by the state, the U.S. Department of Education reserves the right to disqualify a school’s application and/or rescind a school’s award.
7. The nominated school has not been identified by the state as “persistently dangerous” within the last two years.
8. The nominated school or district is not refusing Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district-wide compliance review.
9. The OCR has not issued a violation letter of findings to the school district concluding that the nominated school or the district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan from the district to remedy the violation.
10. The U.S. Department of Justice does not have a pending suit alleging that the nominated school or the school district, as a whole, has violated one or more of the civil rights statutes or the Constitution’s equal protection clause.
11. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the school or school district in question; or if there are such findings, the state or district has corrected, or agreed to correct, the findings.

## PART II - DEMOGRAPHIC DATA

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Data should be provided for the most recent school year (2018-2019) unless otherwise stated.

### DISTRICT

1. Number of schools in the district (per district designation):
- 150 Elementary schools (includes K-8)
  - 16 Middle/Junior high schools
  - 57 High schools
  - 1 K-12 schools
- 224 TOTAL

### SCHOOL (To be completed by all schools)

2. Category that best describes the area where the school is located:
- Urban or large central city
  - Suburban
  - Rural or small city/town
3. Number of students as of October 1, 2018 enrolled at each grade level or its equivalent in applying school:

Grade	# of Males	# of Females	Grade Total
PreK	0	0	0
K	0	0	0
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	0	0	0
6	0	0	0
7	29	27	56
8	26	36	62
9	113	86	199
10	120	92	212
11	91	98	189
12 or higher	109	105	214
<b>Total Students</b>	488	444	932

\*Schools that house PreK programs should count preschool students **only** if the school administration is responsible for the program.

4. Racial/ethnic composition of the school (if unknown, estimate):
- 0 % American Indian or Alaska Native
  - 11 % Asian
  - 68 % Black or African American
  - 9 % Hispanic or Latino
  - 0 % Native Hawaiian or Other Pacific Islander
  - 6 % White
  - 6 % Two or more races
  - 100 % Total**

(Only these seven standard categories should be used to report the racial/ethnic composition of your school. The Final Guidance on Maintaining, Collecting, and Reporting Racial and Ethnic Data to the U.S. Department of Education published in the October 19, 2007 *Federal Register* provides definitions for each of the seven categories.)

5. Student turnover, or mobility rate, during the 2017 – 2018 school year: 3%

If the mobility rate is above 15%, please explain.

This rate should be calculated using the grid below. The answer to (6) is the mobility rate.

<b>Steps For Determining Mobility Rate</b>	<b>Answer</b>
(1) Number of students who transferred <i>to</i> the school after October 1, 2017 until the end of the 2017-2018 school year	13
(2) Number of students who transferred <i>from</i> the school after October 1, 2017 until the end of the 2017-2018 school year	15
(3) Total of all transferred students [sum of rows (1) and (2)]	28
(4) Total number of students in the school as of October 1, 2017	888
(5) Total transferred students in row (3) divided by total students in row (4)	0.03
(6) Amount in row (5) multiplied by 100	3

6. English Language Learners (ELL) in the school: 1%  
12 Total number ELL

Specify each non-English language represented in the school (separate languages by commas):

7. Students eligible for free/reduced-priced meals: 68%  
Total number students who qualify: 634

8. Students receiving special education services: 3 %  
25 Total number of students served

Indicate below the number of students with disabilities according to conditions designated in the Individuals with Disabilities Education Act. Do not add additional conditions. It is possible that students may be classified in more than one condition.

- |                                  |  |
|----------------------------------|--|
| <u>7</u> Autism                  | <u>0</u> Multiple Disabilities                 |
| <u>0</u> Deafness                | <u>0</u> Orthopedic Impairment                 |
| <u>0</u> Deaf-Blindness          | <u>3</u> Other Health Impaired                 |
| <u>0</u> Developmental Delay     | <u>2</u> Specific Learning Disability          |
| <u>2</u> Emotional Disturbance   | <u>3</u> Speech or Language Impairment         |
| <u>3</u> Hearing Impairment      | <u>1</u> Traumatic Brain Injury                |
| <u>0</u> Intellectual Disability | <u>1</u> Visual Impairment Including Blindness |

9. Number of years the principal has been in her/his position at this school: 6
10. Use Full-Time Equivalents (FTEs), rounded to nearest whole numeral, to indicate the number of school staff in each of the categories below:

	<b>Number of Staff</b>
Administrators	1
Classroom teachers including those teaching high school specialty subjects, e.g., third grade teacher, history teacher, algebra teacher.	38
Resource teachers/specialists/coaches e.g., reading specialist, science coach, special education teacher, technology specialist, art teacher, etc.	7
Paraprofessionals under the supervision of a professional supporting single, group, or classroom students.	2
Student support personnel e.g., school counselors, behavior interventionists, mental/physical health service providers, psychologists, family engagement liaisons, career/college attainment coaches, etc.	4

11. Average student-classroom teacher ratio, that is, the number of students in the school divided by the FTE of classroom teachers, e.g., 22:1 24:1

12. Show daily student attendance rates. Only high schools need to supply yearly graduation rates.

<b>Required Information</b>	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014
Daily student attendance	97%	95%	98%	97%	97%
High school graduation rate	98%	96%	96%	99%	97%

13. **For high schools only, that is, schools ending in grade 12 or higher.**

Show percentages to indicate the post-secondary status of students who graduated in Spring 2018.

<b>Post-Secondary Status</b>	
Graduating class size	198
Enrolled in a 4-year college or university	62%
Enrolled in a community college	16%
Enrolled in career/technical training program	0%
Found employment	8%
Joined the military or other public service	12%
Other	2%

14. Indicate whether your school has previously received a National Blue Ribbon Schools award.

Yes  No

If yes, select the year in which your school received the award. 2008

15. In a couple of sentences, provide the school’s mission or vision statement.

Carver Engineering & Science prepares students for college success through a rigorous curriculum and enriching extra-curricular opportunities.

16. **For public schools only**, if the school is a magnet, charter, or choice school, explain how students are chosen to attend.

Students are selected on four criteria: (1) Grades; (2) Test Score; (3) Attendance; (4) One-page essay about student wishes to attend Carver Engineering & Science

## **PART III – SUMMARY**

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George Washington Carver High School of Engineering and Science is a public magnet school in the School District of Philadelphia. Carver serves 940 students in grades 7-12, representing 45 different zip codes and reflecting the rich diversity of the city. Seventy-five percent of students come from low-income families and 67% aim to become the first person to graduate college from their families.

Carver was founded nearly 40 years ago with the explicit purpose of creating opportunities for college and career readiness for students who were underrepresented in engineering and medical fields. In 2015, the school expanded to add a middle school to our high school, which afforded the school the chance to plan curriculum to position students even earlier for college success. Today, the school's mission is to prepare our students with the academic and personal skills for collegiate success and to empower our students with the social and leadership skills to be lifelong learners and productive citizens. With a track record of student success and a history of Engineering, Calculus and Computer Science courses, Carver is the region's original STEM school and offers educational opportunities that change the life trajectories of its students.

Graduates from Carver have consistently gone on to experience success and many alumni send their children here. One powerful tradition at graduation is for the alumni parents of graduating seniors to join the graduates on stage to move their tassels. It is a testimony to legacy we have established here. Our school community continues to create new traditions, including inspiring, student-led events throughout the year that focus on diversity, community, and student voice.

The academic program is driven by two key principles - choice and rigor - to reflect a college learning experience. In 2013, the school offered 6 AP with 100 students enrolled. In 2018, 250 students enrolled across 15 AP courses. Notably, Carver students have improved passing rates with this course growth. In addition, midway through 9th grade, Carver students develop a course plan to carry them through their remaining three years of high school. While there is flexibility to adapt the plans as needed, students are encouraged to sequence their courses and set their goals on an academic pathway towards an area of interest. Students at Carver continue to raise the bar through their engagement with the courses and the agency they experience in selecting their course path.

An additional focus at Carver is the robust offerings of extracurricular programming for students. Not only do these opportunities extend learning beyond the school day and school building, it also provides students for student leadership. A recent student survey, 92% of students identified as being connected to an extracurricular program in the school. Student leadership is a key aspect of the collaborative innovation strategy that we have implemented to put our values into action.

Further, to increase our impact, Carver has developed partnerships with several local organizations. Steppingstone Scholars works with Carver to provide additional college preparatory and STEM-focused resources to the school. Alongside Mighty Writers, Carver is creating a full-service writing center and providing "Writing Coaches" to push in to classes to improve student writing. Big Brothers / Big Sisters gathers a group of entrepreneurs to mentor our students on a bi-weekly basis. This is just a sample of the many partnerships Carver employs to improve our culture of achievement. Taken together, they allow us to round out the educational experience for our students.

To continue to bring our vision to life, Carver has developed a plan to renovate our old, outdated, underutilized library space into a vibrant new space designed to help our students be college- and career-ready. The Carver Commons will provide a center for inquiry-based learning, scholarly research, a full-service writing center, collaborative workspaces, individual study areas and a symposium area for larger presentations. Through this range of usage strategies, the Carver Commons will serve as a central part of our school's learning community, and the Carver Commons will impact every student in our school.

Carver was founded as a school with an optimistic and progressive vision to provide an education rooted in equity and access with a focus on college success. Today, our vision remains consistent, as we continue to focus on the future, keeping us engaged, nimble and innovative.

## **PART IV – CURRICULUM AND INSTRUCTION**

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### **1. Core Curriculum:**

#### **1a. Reading/English language arts:**

In 2016, only 2% of Carver students scored advanced on the Literature Keystone exam; in 2018, 16% scored advanced and 0 students were below basic on the Literature Keystone exam. Upon realizing the limited success of our students, the school developed a common planning period for English teachers to co-design a schoolwide writing structure while sharing data and student writing to ensure their collaboration is rooted in realities of student work. The collaboration has also led to a unified curriculum sequence across the high school. The English department regularly analyzes both standardized and classroom-based assessment data to create a more purposeful and unified scope to the high school curriculum.

In addition, the English department has developed outside partnerships to enrich our curriculum. Both the 7th and 8th grade participate in the Poetry Out Loud initiative. The Philadelphia Young Playwrites provides a resident-artist to support our 8th grade students in writing monologues. For the past five years, the Wilma Theater works with our high school students to develop an original play, while the students also attend three plays throughout the year.

The English department has also reshaped its course offerings to develop more opportunities for research. Carver was among the first schools in the state to offer AP Seminar, and we are expanding to AP Research. In addition, the new Journalism elective has allowed our students to complete investigations into issues involving the school and broader community that interest the students.

Finally, all 12th grade students complete a senior project, consisting of a 6-10 page research paper driven by student interest and future goals. This culminating paper requires students to integrate a diverse set of sources and present their research to their peers. This project demonstrates college ready writing and research by all of our graduating students.

#### **1b. Mathematics:**

Carver strives for as many students to reach Calculus by senior year (or before) as possible. To accomplish this goal, we have developed flexible curriculum pathways for our students. This goal requires us to bring different pedagogical approaches and curriculum frameworks depending on the needs of our students.

Beginning in 7th grade, we address both the conceptual understanding and procedural skills necessary for progressing into Algebra 1. Students meet for two periods a day. In addition to following a Pre-Algebra curriculum, the teacher also regularly integrates Engineering Design projects for the students to experience how math is applied to real world. Students also regularly use Imagine Math, an individualized, online learning platform, for students to build their foundational math skills. This resource provides an important assessment tool to ensure all students in our school have the appropriate math foundation. In 8th grade all students take Algebra 1. 86% of our 8th grade students passed the Algebra 1 Keystone Exam in 2018.

Our high school curriculum offers a flexible course sequence to meet students at their level while also allowing students to accelerate at different points. 96% of the Class of 2019 passed the Algebra 1 Keystone, and fewer than 30 current 10th graders have not passed it. Through this strong foundation of math ability, students have the option to take two math courses in either 9th or 10th grade to ensure they can reach Calculus. This year, through these various pathways, 115 students are enrolled in Calculus, including 17 students who are taking AP Calculus BC in their second year of Calculus.

#### **1c. Science:**

Five years ago, Carver added our 7th and 8th grade. The addition of the middle school was the impetus for intentional science curriculum planning by a group of experienced science and math teachers. To that end,

the teacher planning committee developed two Foundations of Science courses for the 7th and 8th graders. The courses seek to address traditional inequity in elementary science education in Philadelphia by immersing students in labs, lectures, hands-on learning, and research as they cycle through units on Biology, Psychology, Chemistry, and Physics as a means to high school preparation. As such, a variety of assessment tools are used to provide both lab and projects as well as traditional end of unit tests. Further, 7th graders visit the Wagner Free Institute of Science monthly for lessons and scavenger hunts in the museum's collection around urban ecology, evolution, and rocks and minerals.

Last year at the high school level, 87 students enrolled across 4 AP classes, AP Biology, AP Chemistry, AP Physics and AP Environmental Science. These courses are all designed as double periods to allow for lab opportunities. The learning experiences Carver students actively engaged in each year from 7-12th grade at Carver allows for multiple points of engagement with science literacy. 9th graders take Biology as well as Science Research. The research class designed is to expose 9th graders to science writing, increase digital literacy in science, and build civic engagement around science. The end of of course assessment in this class is a research paper. In 10th and 11th grade, students study Chemistry and Physics. Electives in the sciences allow students to pursue interests in forensics, anatomy, and bio-medical engineering. In anatomy, our partnership Drexel School of Medicine augments the 10th graders' learning with experiences and mentorship. Every year, we have multiple students advance in Science Fair and Science Olympiad competitions from the city to regional competitions.

#### **1d. Social studies/history/civic learning and engagement**

At Carver, our history and social studies classes invite students to “think like a historian.” Our teachers position primary sources and project-based learning as the modus operandi to drive content learning in every course of study. 7 and 8 graders learn study habits and content as they dive into Early History, Global Studies and Early US History. Role play develops strong questions in 8th grade like, “who is the we in ‘we the people?’” 7th graders lead the school to support water projects as they develop a fundraising project, political letter writing, and research. Last year, through 7th grade leadership, Carver helped to fund a rainwater catchment at a school in Kenya. In high school, African American history and other courses are writing, research, and presentation intensive. 10th graders in African American history hosted a modern day interpretation of the Harlem Renaissance that featured student poetry, dance, and artwork. Teachers in the social sciences apply the school-wide writing program to give students tools to think through historical themes through their writing.

Electives in the social sciences afford students the space to explore Law, Philosophy, and Psychology. 9th graders take World History, 10th graders study African American History, 11th graders dive into US History or AP US History and 12th graders take Social Science or AP Government. Teachers in our core Social Studies courses share common end of unit assessments to align instruction. AP classes are also offered in Microeconomics, World History, and Psychology. The social studies classes at Carver uniquely position our students for collegiate success by developing dynamic thinking habits in history, while allowing for individual interests and investigations.

#### **1e. For secondary schools:**

College success drives every decision we make at the school. We seek to ensure our students are prepared for the systems found in a college environment, including choice, options, exposure, and rigor. These aspects are infused in our systems for course selection, counseling, and community partnerships.

In addition, every fall, Carver holds an annual College Day. The middle school students visit Temple University. The 9th and 10th grade students visit one of 15 schools in our region. The counseling office organizes a college fair with representatives from about 70 colleges and universities for our 11th and 12th grade students. While this day serves as the hallmark for our college and career readiness initiatives, it is not done in isolation.

#### **1f. For schools that offer preschool for three- and four-year old students:**

## 2. Other Curriculum Areas:

Carver students are encouraged to lead with innovation as they immerse themselves in the study of other curricular areas.

Thinking and learning in STEM permeates every step we take at Carver. Our STEM rich coursework is grounded in experiences for all 8th and 9th graders with the Intro to Computer Science class. Students go on to take Computer Science and Engineering Electives that encourage deep dives into coding and programming as well as modeling and prototyping. Coursework in Engineering and Computer Science is peppered with opportunities for certificates and partnerships. Students see the fruits of their labor with Computer-Aided Design Certificates and participation in the Urban Science Olympiad and Robotics competitions. National Association of Black Engineers, Army Corps of Engineering, Temple College of Engineering, Architecture Construction and Engineering (ACE), as well as partnerships with the Navy Yard provide transformational mentorship and real time feedback to our budding engineers. College and career preparatory coursework in the AP Computer Science Principles and AP Computer Science A follows for students with a penchant and passion for leading the way into the future of computer science.

Student voice is ever present in the expanding role the arts plays in school culture at Carver. STEM guides movie making and more in our Digital Editing courses. The brand new Carver Choir, a collaboration between Carver and the Dean at Temple University's Boyer School of Music, Dr. Rollo Dilworth, functions as both a site for rich choral instruction as well as a vehicle to prepare for community performances. Instrumental musicians delve deeper into their craft with instruction from itinerant music teachers in strings, brass, and percussion instruments. The school's art teacher leads the Yearbook class, another opportunity for students to design and create in order to develop lasting community. Dance 1 and Dance 2 classes, as well as the Carver Enginettes, the dance team, further provide space for students to create a vibrant school culture based on both expression and discipline.

Wellness is not just a buzzword at Carver. Physical Education is a required class for our 9th and 12th graders, with everything from tennis and archery to soccer and volleyball. We have a robust roster of extracurricular sports throughout the school year. Health classes focus on many aspects of wellness, and encourage students to become leaders among their peers, families, and communities to advocate for changes to reflect a healthy mind-body connection. Our partnership with Eat.Right.Now plays a consistent role in modeling and mentoring what healthy eating looks like. High schoolers are invited to participate in Outward Bound twice a year, in the fall and in the spring, as a way to grow leadership and stamina in the outdoors on a week-long canoe trip and hike.

Mandarin and Spanish instruction are offered for three years, with an opportunity to study AP Mandarin for a fourth. However, the school's global literacy does not stop with language instruction. We have a sister school in Frankfurt, Germany. As we write this, a group of Carver students is staying with host families and attending classes with students in Germany. We will host students from Frankfurt next year.

The school has a commitment to a young author, Liliana Velásquez, from Guatemala. We read her autobiographical book *Dreams and Nightmares* yearly and invite her to speak to our Spanish classes and our 7th graders. Our school community has a deep sense of the intersection between gender, domestic violence, social class, and immigration because of our partnership with Ms. Velásquez.

Global water issues matter to us at Carver. We walk the talk with our school-wide celebration of World Water Day complete with performances, data, decorated doors, and even robots. Middle schoolers fundraise with Water for Life and have helped to build latrines, hand washing stations, and a rainwater catchment system at an elementary school in Kenya.

### **3. Special Populations:**

Carver prides itself on its ability to respond to the needs of every student. We established a range of tiered supports to ensure our students feel not only safe but also supported in our school. A constant refrain heard in our school is “smart people ask for help” and this mantra is brought to life in a variety of ways.

While our Special Education population is low in comparison to other schools, we excel at supporting the variety of needs that our students exhibit. Our program runs with a Resource Room model in which students spend one period a day with a Special Education teacher, and one of our two teachers pushes into many of our 9th grade courses. Identified students do not feel stigmatized or isolated in our school, and they often report their ability to succeed is fueled by the advocacy that we support them in developing.

We have also developed an intensive Multi-Tiered Support System (MTSS) program to respond to other struggling students. Three teachers have release periods built into their schedules to provide academic support to students who are not achieving. Our teachers meet bi-weekly with students to review grades, discuss strategies and provide greater support for the students. This intervention is coordinated alongside our counselors, and it allows us to broaden our level of supports, creating more opportunities for our counselors to address students with more complex needs as well as coordinate 12th grade college advising.

A unique aspect of our demographic is that while 100% of our students are accepted to college, approximately two-thirds aim to be the first in their family to graduate from college. Many of our “first gen” students are children of immigrants, while others come from working-class homes. In either case, our families do not have the knowledge or experience to support students through the college process. In response, we have created a mandatory Senior Seminar class to provide the necessary support structure for our students. Class sizes in this class are the lowest in the entire school with 15 students per class, and the course is co-taught by a teacher and a counselor. The course is designed to offer the practical day-to-day logistical guidance necessary to completing the college application process while also providing the necessary relational support structures to guide students and families through this stressful process.

In addition, our library is a vibrant place after school. Every day two teachers oversee “Homework Zone” to offer additional help, while National Honors Society Peer Tutors are meeting with students. Other students access computers and other resources that may not be available outside of school to ensure they can complete their assigned work.

This school year, we are piloting two initiatives meant to help students slow down and focus, without taking anything away from the rigor of our academic program. First, by altering our bell schedule, we introduced a study hall period, providing time for students to work on projects, do their homework, and read. Second, we partnered with Mighty Writers and Temple University’s Education Department to open a writing center, where students can access additional support during lunch and after school.

## PART V – SCHOOL SUPPORTS

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### 1. School Climate/Culture:

Agency and involvement drive school culture for students and teachers at Carver. The Carver community seeks to create a talent pool, in contrast to a pipeline, where each and every student has opportunities to take interesting and high-level courses, develop new interests, and take on leadership roles. Our goal is to design our high school so that by the time students graduate and enroll in higher education, they are ready to navigate decisions that arise in college and university spaces.

Building capacity in students and staff is a constant process. For students, we believe that choice is key. When students create their own plans and own sequence of courses, they are more invested in their college preparatory education here at Carver. Equity is also key to building student capacity. This is evident in after school clubs, partnerships, and increased student participation in every area of the school. This year for example, students and teachers collaborated with the principal, the music department at Temple, and the music department at the School District of Philadelphia to co-create the Carver Choir. The choir performed at three school-wide events and two community events this year already. As students experience the freedom of choosing courses and the equity of full participation in school life, we hope to see data that their college experiences are equally fulfilling.

Teachers at Carver experience collegiality and opportunity for inquiry and professional growth daily. Overall, teachers feel valued and supported. When surveyed, they mention the power of collegiality, the opportunity to develop new courses, co-teaching, teaching resources, and technology as keys to the teaching climate at Carver. Carver supports AP training for staff as well as facilitates professional development for staff from to grow inquiry-based teaching at school. These initiatives support teachers to grow capacity for college preparatory instruction. Common planning time provides teachers space to cooperate and collaborate on courses like AP Seminar and provides new teacher support. Common planning time extends to the English team PLC, who meet together to develop school wide writing initiatives, to support argumentative writing across the curriculum. Teacher Inquiry group meets after school to discuss equity issues as well as inquiry-based teaching strategies. All of these initiatives build community and create capacity in teachers to lead from the classroom.

While Robotics and Chess programs continue to flourish, Carver has expanded to offer more programming in different areas to best meet the needs of all students. In addition to the Carver Choir, last year, we published the inaugural Carver Times, which won several city-wide journalism awards in its first year. Now, in its second year, we have expanded from a club to a full course, merging the extracurricular and academic programming. This variety of programming motivates and engages our students and faculty in a positive and dynamic environment.

### 2. Engaging Families and Community:

As initiatives at Carver have expanded, parents have responded to his initiatives with a desire to be more involved at school as well. The Home and School engages in family partnerships with parent communication, Spring Community Day, and supporting 9th grade orientation. They take part in fundraising to support academic achievement and help with graduation scholarships. Parents work in many capacities from course selection and planning and career day, to IMC re-design. Additionally, they support academics by providing input on curriculum, teacher hiring, and annual budget review. Finally, they respond to school data around climate and standardized testing.

Four years ago, Carver started a Saturday STEM program through funding from the Jack Kent Cooke Foundation and in partnership with Temple and nearby low-performing elementary schools. We welcomed middle schoolers who live in our neighborhood to advance their proficiency in STEM, harness their curiosity, and sought to increase enrollment to Carver from students in North Philadelphia. Further, Temple's Education Department has a close relationship with Carver, with the TU Teach program. We have an exciting new Dual Enrollment program scheduled from 2018-2019 school year with Temple to

engage students in the intersections of Engineering and Computer Science with an innovative course on Cyber Security. Finally, 2017 saw the inaugural group of Temple Chairman's Scholarship Program awards, which provides mentoring, a \$10,000 annual scholarship, and meal plans to five incoming Temple freshmen from Carver. The Trustee Chair said it best, "Carver is the ideal partner for this scholarship and mentoring program. This collaboration strengthens bonds between two institutions that are not only based in North Philadelphia, but also share a commitment to providing a superior education to students of all backgrounds." We believe that student engagement with Temple will support our academic programs to provide middle and high school students with collegiate rigor before they even apply to college.

Another extension of our community partnerships is through our relationship with Steppingstone Scholars. Together, we established a shared position of a Partnership Coordinator in August 2017. This position focuses on expanding student opportunities that will prepare them for college and career success. In September 2017, they hosted a Career Day with 35 professional panelists, as well as 25 11th and 12th grade panelists who presented on their internship and work experiences to their classmates. The Partnership Coordinator also facilitated new partnerships with Philly Reading Coaches, MESA PA Apprenticeship in Urban Sustainability, Agriculture and Responsibility (AUSAR), and Big Brothers/Big Sisters.

As our programming continues to expand, Carver has partnered with Teachers' College at Columbia University to better research the practices that are working and support continued professional development. This partnership has created a new layer of support and awareness for our school community as we continue to seek ways to improve.

### **3. Professional Development:**

Professional development at Carver is designed to maximize the ability of students and teachers to create a college going environment in high school. The range of professional development reflects the same breadth of interests and experiences that we cultivate in our students.

We place a special focus on professional development for new teachers at Carver. One veteran teacher has a release period each day to support new teachers. New teachers share classroom space with each other and with veteran teachers quite purposefully, to create a community of practice around conversations relating to student work, curriculum development, and even content specific rituals and routines.

At Carver, students are positioned as teachers and teachers as students during school-wide Professional Development. This year, 9th graders took the lead, along with two Health and PE teachers, to engage teachers in thinking about school-wide wellness. During another school-wide PD on an election day, students in the Journalism class presented their investigations to the staff. At Carver, we know our students are civically engaged in diverse ways, and we want to model our instruction and practices around what drives our students.

Teacher teams comprise the heart of professional development at Carver. Many teacher teams convene weekly to support academic standards and support student achievement. One of these teacher teams is the Inquiry Group. Grounded in equity, the Inquiry Group meets weekly to plan school-wide programs and discuss classroom practice. For Black History Month, for example, the Inquiry Group involved students to co-write a shared poem and curate a set of performances around the theme "Black Love." Hundreds of students co-wrote the shared poem that was performed on Valentine's Day for the school community. The Inquiry Group is grounded in the belief that teachers learn from each other and from students.

Teachers at Carver participate in a wide range of PD outside of school to support the growth of college going practices in our classes. Currently, social studies teachers participate in Penn GSE's Project Based Learning course, in turn bringing quality experiential learning to their classes. The Journalism teacher is engaged in work with the National Writing Project group, 3D Civics, led by an education professor from Rutgers. This project has opened communication between our students in Philadelphia and 3D Civics students in five other schools in the United States. A history teacher attends workshops with the Historical Society, who in turn provide summer workshops and visiting historians to Carver classes. Our Engineering

teacher works closely with Project Lead the Way, attending workshops and seminars to develop engineering curriculum. Teachers have participated in National Endowment for the Humanities summer institutes to infuse their curriculum with jazz and Zora Neale Hurston. The breadth of teacher engagement in out of school Professional Development provides a rich terroir for teaching and leading once back in the classroom.

#### **4. School Leadership:**

The principal's leadership philosophy is developed around the importance of creating space for others. It is designed to be inclusive and allow for innovation. Leadership emerges from relationships and trust; in turn, the principal offers a great deal of autonomy to teachers, students and school partners to create meaningful and sustainable programming. This leadership approach allows him to promote new opportunities with internal and external stakeholders. He also remains connected to the wide range of academic and extracurricular programming at the school without the responsibility for the execution of the programs.

This approach also allows for leadership to emerge in organic ways without a rigid or hierarchical structure. The school's limited resources and single administrator for 930 students further demands a creative and nimble approach to shared leadership. There is a core leadership team comprised of the: Middle School Coordinator, Research Coordinator, MTSS Coordinator, Dean, and Union Building Representative. While these positions offer important insights to the academic and culture aspects of the school, the people are involved because of their belief in collaboration, creativity in problem solving and commitment to the school's mission. This team also serves to represent the diversity of perspectives in our school.

Three years ago, alongside the schoolwide writing prioritization, the principal identified an opportunity for 9th grade students to research and write outside of the English class. In collaboration with the Research Coordinator, they developed the framework for "Introduction to Science Research." The course would replace to half-year STEM focused classes, required for all 9th grade students and teach students to "read, write, and think like scientists." The Research Coordinator served as a teacher coach for two Science teachers to guide them in teaching writing, while allowing their passion and expertise in Environmental Science and Engineering to drive the content of the course. Now, our students are writing 4-page research papers on topics ranging from sickle cell research to planet development to genetically modified mosquitoes. The principal identified a need and worked with others to create a space for students and teachers to flourish.

The principal believes that for people to learn and grow, the culture of the school must be supportive, responsive, and positive. As such, his leadership approach is optimistic, focusing on strengths and possibilities. This stance is infused in our school mission of college success for all of our students, and it is enacted in the priorities of the school.

## **Part VI – STRATEGIES FOR ACADEMIC SUCCESS**

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Collaborative innovation drives academic success at Carver. The practice of creating together at Carver is deeply rooted in the school culture. The principal, teachers, school staff, and the community are responsive to data about students together. The development of the school-wide writing model in the English PLC made a lasting mark on how our students write and think across grades and content. Iterations of the writing model are present everywhere in the school from 7th grade General Science to 9th grade Science Research to 12th grade Senior Seminar and every English class in between.

Other collaborative innovations center around the expansion of our AP courses. Instead of placing students into AP classes, a team of teachers and school leadership revamped the process by emphasizing choice, putting students in the position to make informed course selections about AP classes, based on consideration of their own passions, skills, interests, and career goals. Since the principal began six years ago, we expanded our AP offerings from six to 15, including at least one in every core content area. Also, to help students plan their course choices over their four years, we provide them with much clearer information about prerequisites — for instance, if students are interested in psychology, then they are encouraged to take Intro to Psychology in 10th grade and AP Psychology in 11th grade, perhaps supplementing the course with AP Statistics in 11th or 12th grade. We redesigned the course selection process along the lines of what students will encounter in college, where they must take 200-level courses before 300-level courses and round out their majors with related courses from other departments.

Collaborative innovation by teachers, students, and community around school-wide events reflects the cultural, racial, and ethnic diversity of our school. The Teacher Inquiry group meets with students throughout the year to plan assemblies, teach-ins, and even a door decorating contest for Black History Month, International Human Rights Day, and World Water Day. This kind of co-planning furthers the intellectual development and foments rich dialogue that informs academic excellence.

Looking ahead, collaborative innovation will also drive the design of our school. We are in the process of remodeling our school’s library space from a traditional lending library to a more dynamic learning commons. The “Carver Commons” will resemble a college learning environment with a variety of learning spaces from a research hub to collaboration rooms to individual study pods. It will serve as the hub of collaborative innovation for our school community.

These collaborative innovations play an important role in helping our students become more focused and self-directed, which will serve them well in higher education.