

Pioneer Charter School of Science IV Executive Summary

The mission of Pioneer Charter School of Science (PCSS) IV is to prepare educationally under-resourced students for today's competitive world. PCSS will help students to develop the academic and social skills necessary to become successful professionals and exemplary members of their community. This goal will be achieved by providing the students with a rigorous academic curriculum with emphasis on math and science, balanced by a strong foundation in the humanities, a character education program, career-oriented college preparation, and strong student-teacher-parent collaboration.

PCSS-IV will replicate the successful model of the PCSS (the flagship school) in the cities of Medford, Melrose, Saugus, Stoneham, Wakefield and Woburn. PCSS is a successful nonselective STEM based school located in Everett. On the MCAS, PCSS students have surpassed their sending districts and the state averages in all the grade levels that they were tested in. PCSS ranked as the eighth highest district in grade ten mathematics and tenth highest district in grade ten science in 2011. Moreover, PCSS eighth graders were the first in the state in mathematics for student growth and the tenth graders were the fifth in the state. In 2012, PCSS was recognized as the second highest growing district in 10th grade mathematics. Recently, Boston Magazine recognized PCSS as the fourth highest ranked charter school.

PCSS has been making a real difference in the lives of its students. The first graduating class of PCSS started the school with the same dismal MCAS mathematics scores that were reflective of the sending districts. By the time they reached high school PCSS students increased their performance by 59 percentage points (almost three times more than where they started), while their peers in sending districts increased their performance from 19 to 35 percentage points (and the increase for state average was only 26 percentage points). PCSS students had the second highest student growth results in the state for grade ten mathematics. The difference for the class of 2013 is 64 percentage points.

Our graduates have done well too. 97% of our first graduating class have been accepted to colleges. The amount of scholarships raised by our first graduating class was \$94,000 per student on average. The class of 2013 is on its way to beat the success of their schoolmates. Already a remarkable 76% of this year's graduating class qualified for the state's prestigious John and Abigail Adams Scholarship. College readiness has become the norm and part of the school culture at PCSS. About 70% of our current juniors and seniors take at least one Advanced Placement course.

PCSS-IV will be established as a regional school within the districts of Medford, Melrose, Saugus, Stoneham, Wakefield and Woburn. When fully operational, the school will serve grades 7-12 with 360 students at maximum. The development group consists of the current Board of Trustees and administrators from PCSS (the flagship school). The applicant group is recognized as a proven provider by the Department of Elementary and Secondary Education.

The applicant group is motivated with the idea of helping today's students to have a better future in the proposed region. They are united for the same ideal that all children can learn and strive toward their highest levels of capability as long as they are given the opportunity. The faculty and staff of PCSS-IV, in collaboration with parents, will provide this opportunity in the proposed region by creating a learning atmosphere where each student will learn how to use their potential. Our students will strive toward their highest levels of capability with an education addressing their individual learning styles. Upon graduation from PCSS-IV, our students will be equipped with a solid math and science background and will have developed the essential academic skills, social skills and ambition to pursue their education at prominent colleges. PCSS-IV will engage students through home visits, tutorials, peer study groups, and individualized instruction. Through the character education program at the school and support from the parents at home, our students will build good personality and will develop into responsible citizens with high moral values. Our teachers will also endeavor to be role models for the students in character education. Our parents will establish stronger relations with their children and the school community

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through various programs at the school. PCSS-IV will collaborate with local universities, community agencies, and educational institutions to share resources and to build community assets. PCSS-IV will create science initiative programs to provide opportunities for internships, projects, and participation in local, national, and international science fairs and competitions. PCSS-IV, including the faculty, staff, students and parents, will be an example institution in all aspects in the society it serves. Our students will be of good character and will have high academic performance. They will become exemplary pioneers in their community.

PCSS-IV is envisioned as a charter school with the following four guidelines:

- 1) A rigorous curriculum with emphasis on math and science
- 2) Career-oriented college preparation
- 3) Character education
- 4) Individual attention through the student-teacher-parent triad

PCSS-IV will implement a campus-wide Character Education Program that will help students build good character, personality, and leadership skills; improve academic performance, general behavior, and attitudes; and reduce discipline referrals, dropouts, expulsions, crime rates, and drug use. Students at PCSS-IV will be encouraged to take responsibility for their actions, seek positive role models, and to develop into good citizens with high moral values.

A maximum faculty-student ratio of 1:15 and a total enrollment of 360 students at full capacity will ensure that each student will receive adequate individual attention. This will enable us to determine each student's needs and problems and, therefore, provide each student with the necessary tools and programs to help them to succeed. Each full-time teacher will mentor a cohort of students, monitor their progress in each subject, and contact their parents regularly.

Our plans to support our curriculum include, but are not limited to:

(a) University Collaboration Program, (b) Field Trips, (c) Volunteer Work, (d) School Project Fairs, (e) Peer-tutoring and Mentorship Programs, (f) Athletic Program, (g) Role Model Initiative, (h) Character Education Program, (i) Student Clubs, (j) School Magazine, (k) After-School Program, (l) Awards and Prizes.

PCSS-IV will combine the nationally proven instructional methodologies that have been successful. These include problem-based learning, project-based learning, direct instruction, and collaborative learning.

The school will be in session for 200 days. There will be orientation for the new staff and staff development in the second and third week of the August. Parents will be invited to meet with the teachers during these weeks as well. The school will start at the beginning of the fourth week of August. There will be one-week vacations in December, February, and April.

The sample school day will run from 8:00 a.m. to 3:35 p.m. and is followed by after-school programs until 5.30 p.m. There will be 40 periods of instruction per week. In line with PCSS-IV's emphasis on math and science, the majority of hours will be spent on these subjects. Students will also spend a considerable amount of time with a range of activities such as computers, foreign language, fitness, music, and the arts.

PCSS-IV has a dress code policy to create a safe and orderly environment, instill discipline, eliminate the competition and distractions caused by varied dress styles and reduce the pressure of brand-name dressing, which may affect students from low-income families. A dress code policy will also ensure that

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students enter into school mode even before arriving to school. The thinking in the morning as they put their uniform on will not be “what will I wear today” but “I am going to school”.