



HIGHLINE PUBLIC SCHOOLS Aviation High School

SCHOOL PERFORMANCE REPORT 2010-11 SCHOOL YEAR

ABOUT OUR SCHOOL

Aviation High School (AHS) is the only college preparatory aviation-themed high school in the Northwest. It is our goal to become the premier school of choice for science, technology, engineering, and math (STEM) in the Pacific Northwest. We opened in 2004 with the inaugural class of freshmen and are now at capacity of 400 students in grades 9-12. AHS is a small school with a big vision—the belief that students can be simultaneously prepared for the rigors of college and the performance demands of a high-tech world and workplace. We believe that the work of school can be like the work outside the classroom and still be academically rigorous, and that with the right instructional approach, it is possible for all students to be prepared for higher education and work in a knowledge-based, global economy.

Although Highline Public Schools is the home of this unique learning community, students throughout the Puget Sound region may apply. This year, about 60 percent were local students and the rest commuted from surrounding districts, some as far away as Olympia, Everett, and Bremerton. Many aspire to become scientists, engineers, astronauts, pilots, aviation technicians, and CEOs in aviation/aerospace fields. Some are drawn by the school's focus on math, science, and technology. Others are drawn by our unique approach to teaching and learning.

For the first three years, the school was located on the Duwamish campus of South Seattle Community College (SSCC), close to Boeing Field, airports, The Museum of Flight, and hundreds of aviation-related enterprises that provide opportunities to extend and enrich learning. Since the college was expanding its programs and student enrollment at the same time that Aviation High School was reaching its capacity, we relocated the school to Olympic Middle School in Des Moines. In 2013, we will move to our permanent home at the north end of The Museum of Flight's Airpark, cementing our educational partnership with the Museum and creating a national model for relevant learning and community engagement. The construction of our new school, which is currently underway, is made possible through a public/private capital campaign in which \$43.5 million in commitments were secured from local, state, and federal governments and from industry partners and foundations. Further information about the capital campaign and construction of the new school can be found on the AHS website at www.AviationHS.org.

The school received start-up funding from the Bill & Melinda Gates Foundation and the Port of Seattle. Our active PTSA provides additional resources to enhance teaching and learning. The Paul G. Allen Family Foundation has provided a grant that allowed us to develop a highly successful mentoring and internship program. We are grateful for this kind of support, which makes a positive difference in preparing our students for college, career, and citizenship.

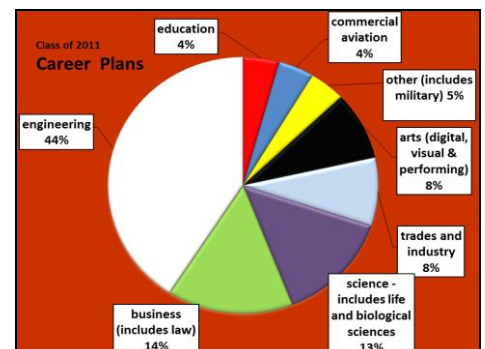
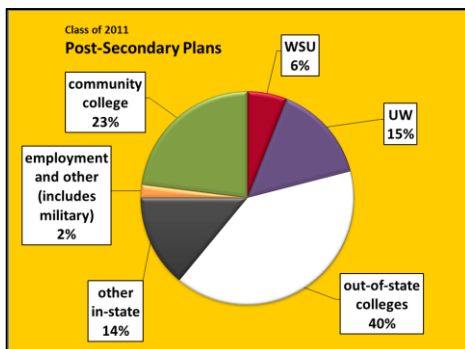


PRINCIPAL'S MESSAGE

We believe that students learn best when they explore, investigate, analyze, reflect, perform, debate, work with others, solve problems, build, design, test ideas, visit places, and interact with mentors and experts. We also believe that students are more likely to think and work hard when they are passionate about the context in which learning takes place. For us, the context is aviation and aerospace.

Flight inspires all of us who work at Aviation High School. We use this theme to focus and integrate the curriculum, and we engage the minds, hearts, and hands of our students in solving complex, authentic problems encountered in the workplace, primarily in the fields of aviation and aerospace. Because the staff of Aviation High School is committed to preparing all of our students for college, career, and citizenship, we focus on measuring our students' work and thinking against both academic and workplace standards. Students use technology to design, to produce, and to communicate, and they demonstrate their understanding and competence through products and performances. They create multiple iterations of designs and present their findings to subject-matter experts who provide feedback and guidance to enhance their learning. One of our sources of pride is that we are constantly engineering the instructional program, both by developing new course offerings and by refining current courses to bring them closer and closer to our ideal approach to teaching and learning.

This year we graduated our fourth and largest class! The graphs below and the Highlights section of this report speak to their plans for college and the scholarships that they received to pursue their dreams and goals.



STUDENT ACHIEVEMENT

HSPE ((High School Proficiency Exam)) results from the spring 2011 assessments are superior, with students meeting or exceeding standard, as follows: 99% in Reading; 97% in Writing; and 88% in Science. High achievement was also shown in End of Course (EOC) exams in Math: Level 1 at 94% and Level 2 at 98%. Aviation High School scored third highest in the State in math and science. This is particularly impressive given the demographics of AHS in comparison with the top two performing high schools. AHS students also performed well above the state and national averages on PSAT, SAT, and AP exams.

HIGHLIGHTS

- We graduated 92 students, 94% of whom met college readiness standards. Many were accepted to prestigious universities around the country, e.g., Berkley, MIT, California Polytechnic Institute, Embry-Riddle, Worcester Polytechnic Institute, UW, WSU, Williams College, Harvey Mudd & Seattle University.
- One-third of graduates in the Class of 2011 were among the top 10% of all graduates in the State of Washington; collectively they earned \$1.6 million in scholarship awards and performed 9,500 hours of community service.
- AHS was again recognized as a Washington Achiever School for overall student achievement and exemplary achievement in Science. AHS was the *only* high school in the State recognized for science achievement.
- 242 Advanced Placement exams in Physics, Language Composition, Literature, Chemistry, U.S. History, Spanish, Japanese, Computer Science, and Environmental Science were taken by 125 AHS students who earned an average score of 3.1 (out of 5 possible).
- The Washington State Legislature designated Aviation High School as a Lighthouse model of STEM Education, recognizing its best practices and results in student achievement; and an additional \$1M was appropriated through the capital budget to build a permanent school at The Museum of Flight, bringing the state's total capital contribution to \$3.9 million.
- \$43.5 million in funding was secured to construct a new school at the Museum of Flight.
- Our award-winning FIRST Robotics Team successfully competed at the local, regional, state, and international levels. They continued a tradition of gracious professionalism and earning of prestigious awards, including the Dean's Award to Lydia Johnston who is now attending Worcester Polytechnic Institute in MA.
- Our Science Olympians again hosted a successful invitational and competed in events like Remote Sensing, Bridge Building, and Forensics at local, regional, and state levels.
- Speech & Debate Club had a very successful year, resulting in two students competing at the National Conference in Dallas, TX.
- The school's fledgling Ultimate Frisbee team, sponsored by the PTSA, made a spectacular showing in their first year of competition, winning several games and developing new skills and strategies for the 2012 season.
- Students again participated in numerous large-scale, interdisciplinary projects such as an Environmental Challenge sponsored by the Port of Seattle, developing and applying their skills and content knowledge and presenting their findings in a variety of public formats, including museum performances and presentations to aviation industry experts.

PARENT INVOLVEMENT

Parent involvement is vital to the success of the school mission. Parents are encouraged to contribute 20 hours of time as volunteers in ways of their choosing — assisting in the office; advising a club; providing professional feedback on student work; assisting with recruitment and interviewing of potential staff and students; and chaperoning field trips, dances, or other extracurricular activities. Our very supportive PTSA sponsors annually hold an auction that supports student scholarships and provides enhancements to technology, field trips, and other educational experiences.

ETHNIC BACKGROUND

Black	5%
Asian/Pacific Islander	16%
American Indian	1%
Hispanic	11%
Multiracial	10%
White	57%

FREE AND REDUCED LUNCH 21%

- Students enrolled in Health classes piloted a new unit of instruction in collaboration with UW and EduCurious, using social media to model epidemiological techniques and working with scientists from around the world to design and conduct experiments.
- A series of "College & Career Day" programs connected students with leaders in unmanned aerial systems, engineering and design, commercial aviation etc. to enhance their knowledge of career options and workplace expectations.
- Nearly all of our sophomores were matched with a mentor in an aviation or aerospace-related field and an increased number of students participated in an internship at organizations such as SEAFAIR, Sea-Tac Airport, AeroTEC, Blue Origin, and the FAA.
- The freshman class toured Sea-Tac Airport and the FAA to job shadow and learn about the myriad of career opportunities within aviation and aerospace.
- Our freshmen also made a visit to a community college; sophomores visited UW to gain insights about college admission requirements; several students were sponsored to visit Embry-Riddle Aeronautical University during the summer to learn about their aviation-related degree programs.
- Several students participated in the Governor's Aerospace Conference and attended various aviation conferences to network and learn from industry experts. Over 100 students attended the Pathfinder Gala at The Museum of Flight to honor local leaders who have made significant contributions to aviation.
- Twelve juniors were selected to participate in the Washington Aerospace Scholars program, sponsored by The Museum of Flight and the WA State Legislature. Eight were selected for the summer residency program.
- Students developed and honed their leadership skills through a variety of school clubs: ASB, Culture Club, Honor Society, ACE (Airline Career Experience), Ecology, and others.
- Instructor Mary Ciccone-Cook was selected as a Teacher Liaison by the National Space Foundation and was also selected for participation in the Mark Twain Summer Institute program.
- Two teachers participated in summer externships at Boeing—Karen Wilson for the purpose of connecting student work in math with the work of practicing engineers; and Garrett Shiroma to connect work in chemistry with practical applications in the aerospace industry.
- Jacob Savishinsky was awarded \$10,000 from the Qwest Foundation to purchase new computers, software, and equipment to enhance the school's journalism program.

PLANS FOR 2011 - 12

- Support and challenge our students to become stronger thinkers and doers by creating new and refining existing courses and projects.
- Connect our students with our community through service, events, mentoring, job shadows, and internships, and engage our community in our school as project consultants, judges, mentors, guest speakers, etc.
- Move towards the creation of a professional learning center by engaging teachers in classroom observations, professional conversation, assessment review, collaborative project development, etc.
- Be "greener": enhance recycling program, encourage carpooling, reduce printing, etc.
- Collaborate with our key partner, The Museum of Flight, to align educational programs that synergize and bring light to the visions and missions of our two institutions.

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<http://www.AviationHS.org>

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