

Proposal for Denver Public Schools High Tech Early College

Rationale:

The popularity and success of Denver School of the Arts, CEC Middle College of Denver, Denver Center for International Studies, and Distance Learning illustrates the need for expanded opportunities for our secondary students in the Denver Public Schools to pursue real world experience, global connections, and creative endeavors that will help them excel academically and further their education beyond high school. 80% of today's professional jobs require education beyond high school, (Colorado Department of Labor). Today our students need a minimum of a technical certificate at the post secondary level to enter the skilled job market, and we must help them realize that furthered education leads to numerous pathways in any industry.

Purpose:

To create an opportunity for students in North East Denver to attend a school that is centered on a process of applied rigorous learning and intense connections with industry professionals in Information Technology and design fields, providing opportunities to earn dual credit through concurrent enrollment, and offering opportunities to stay in a program for a 5th year of high school leading to an Associates of Applied Science degree.

Organization:

This proposal is for a high school of approximately 400-500 students, grades 9-13. The school would open in the fall of 2011, with grades 9-10 initially, expanding over a three-year time frame to 11th-13th grades.

The program will be anchored in writing across all content areas and will incorporate project-based learning in all disciplines. The school will be standards-based, and students will be expected to meet the DPS requirements for graduation through traditional and applied classes. Therefore, an Algebra 2 class may not necessarily be a traditional Algebra class, but could be a course in business education that embeds Algebra skills to meet the requirement. The regular school curriculum and the assessment measures used will be designed so students will demonstrate proficiency in clearly stated expectations rather than on the Carnegie model of "seat time" requirements.

Each student will have a Personal Education Plan that provides a pathway leading to a certificate, associates, or bachelor's degree. Students will meet regularly with an advisor who will be a significant adult in their life for all five years of the program.

An advisory committee comprised of practicing professionals (architects, engineers, graphic designers, film makers, informational technology professionals, and business and marketing, etc) and college faculty will provide knowledge, advice, connections, and expertise as the program is designed and implemented.

Curriculum:

The first two years of the program will be focused on mastery of a "Protocol" that will be applied throughout the four-year program. This protocol will be comprised of content knowledge, key cognitive strategies and academic behaviors students will use as they move through the more sophisticated program. (Protocol examples: scientific method, writing in all content areas, research skills, presentation strategies, spatial concepts, communication skills, and all 21st Century Skills).

The second two years of the program will be focused on the application of content through job shadows, intense college credit opportunities, internships, and projects in and out of the school. Student centered projects focusing on real world situations will be stressed.

High Technical Pathways

10-12th Grades	13th Grade
Certificate in Business Administration, Entrepreneurship	Associate of Applied Science in Business Technology
Certificate in International Business	Associate of Applied Science in Business Technology
Certificate in Business Technology- Microsoft Office Manager, Office Manager	Associate of Applied Science in Business Technology
Certificate in Computer Technology	Associate of Applied Science in Computer Information Systems
Certificate in Information Technology	Associate of Applied Science in Information Technology
Certificate in Graphic Design	Associate of Applied Science in Graphic Design
	Students who did not wish to pursue an AAS could work on their Associates of Arts degree.

Staff:

The unique characteristics of the staff for this school require teachers to have a background in industry and to qualify for Career and Technical Education (CTE) credentials. Core academic teachers must be passionate and committed to interdisciplinary studies and value the power of teaming, as well as the CTE instructors. The staff must be process oriented, able to connect academic content to real world situations, creative problem solvers, innovative thinkers, and effective communicators in order to model 21st Century Skills for our students. Since many of the students will be second English Language Learners, Sheltered Instruction Observational Protocol (SIOP) strategies will be a critical component of the school.

Governance:

The school will be a regular DPS School of Choice, as students will be required to fill out an application to be considered for admission. Selection of students will be a mix of interview and lottery process for students in the far North East Quadrant.

A clear and definitive accountability process for student achievement, teacher effectiveness, fiscal management, and program success will be mutually developed and monitored by the school personnel, the School’s Advisory Council, and DPS.

Partnerships to Pursue:

- Microsoft Partners in Innovative Schools program.
- Apple Computer and the New Tech Network.
- Partnerships with local business and industry is critical, possible business would include: Qwest, Comcast, Cisco, Lockheed Martin and Ball Aerospace.

Schools with proven Success:

- High Tech High in San Diego embodies the design principles of personalization, adult world connection, common intellectual mission, and teacher as designer.
- Greenville Technical Charter High School. This Early College program focuses on success in education through academic rigor, technology and career planning, and offers students the opportunity to earn college credit while still in high school