

Career and Technical Education Comprehensive Recommendations

**Education Committee Presentation
March 2, 2010**

The Board Goals for the Superintendent required the delivery of a comprehensive plan for CTE.

- The Goals of the Superintendent for 2009-10 read in part:

Finalize Planning and Implementation for CTE Programming.

- *Continue High School Reform with the emphasis on Career and Technical Education. Present to the Board a plan for CTE no later than February 10, 2010 which creates options of PPS students to access appropriate CTE Programming aligned to economic trends and needs.*

Career and Technical Education has evolved.

- Career and Technical Education programs has moved beyond the traditional ideas of “Vocational” Education.
- The technical skills required of students to enter the workforce are of a higher level than once required.
- The opportunities for student growth and development are great.

Over the past three years, PPS has begun to raise the quality of our programs to reflect the new face of CTE.

- The integration of core curriculum standards into CTE coursework
- The adoption of benchmarks at grades 3-12 throughout district coursework that will ensure that all PPS students have the opportunity to explore careers that fit within their individual interests.
- In accordance with PDE Career and Work standards, the development of an introductory framework within the 8th grade year devoted to career exploration through a variety of activities.
- In conjunction with Curriculum and Instruction, deepening our work with Career and Work standards module in the 9th Grade health and wellness course.

In conjunction with the district managed curriculum, CTE is working to make students *Promise Ready*.

- Enhancing CTE instruction through math and English co-teaching who plan and deliver lessons merging technical and academic instruction
- Incorporating PDE's *MAX Teaching* with Reading and Writing consultants to enhance CTE content-area instruction
- Planning rigorous CTE programming into the Science and Technology Academy (Bio, Computer, Engineering and Environmental Technologies)
- Conducting monthly professional development sessions to support teachers in the design of 4-Sight-, PSSA- and NOCTI-data-based instruction

While raising the quality of our programs, the CTE staff has worked to comply with PDE regulations.

- The CTE staff has examined our own internal practices with respect to course offerings, expenditures and certification of staff.
- The Pennsylvania Department of Education conducted an audit of PPS programs in the spring and fall of 2009, and PPS secondary schools are implementing proposed recommendations.

During the past few years, several delivery models for Career and Technical Education were reviewed in terms of access and cost.

- Models
 - Model One- One Centralized CTE Facility
 - Model Two- Joining a Suburban Consortium
 - Model Three-Current CTE delivery system
 - Model Four- Magnet Academies in Specific High Schools
 - ***Model Five- The Proposed Model: Regional Clusters***

NOTE: Any proposed delivery CTE model must account for enrollment projections.

- Nationally, about ten percent of students in large school districts participate in CTE programs.
 - For Pittsburgh Public Schools, our 9-12 student population is currently about 7800 students
 - As a district, we are projected to have approximately 6000 students in grades 9-12 in five years.
 - Accordingly, any model should be designed for **600-800 students.**

Delivery Model One: One centralized CTE facility

- A Centralized CTE site is an ineffective delivery model.
 - Access: Limited availability to students from across the district.
 - Would students be assigned to this school who the adults thought were less capable?
 - Would high achieving students who have an interest in the programs have access to the programs?
 - Cost: Capital costs exceeding \$100 million are projected for such a facility.

Delivery Model Two: Joining an Existing Suburban Consortium

- Several Suburban Consortia exist on the perimeter of the City of Pittsburgh that PPS might conceivably join:
 - Cost prohibitive
 - Contribution to the Capital Costs of those facilities would be likely.
 - PPS would be required to pay tuition for our students.
 - Limited access for our students
 - Transportation to and from the Centers would be very time-consuming.

Delivery Model Three: Our Model

- PPS currently has various programming in each of our high schools.
 - Access: The programming that exists varies widely from school to school.
 - Quality is different from school to school.
 - Compliance with PDE guidelines for CTE programs has been lacking.
 - Programmatic offerings differ greatly.
 - Costs: Resources are not effectively utilized.
 - Subject to Site-Based Budgeting constraints

Delivery Model Four: Magnet Academies at Specific High Schools

- Seeking to expand the magnet program model, a preliminary recommendation in 2008 called for the establishment of “Academies of Excellence” at specific high schools across the district; several off-site programs; and a few satellites.
 - Access: Given the topography and neighborhood identities in Pittsburgh, the Board questioned whether students from across the district would access these programs.
 - Costs: These were contained because the model sought to build upon existing infrastructure.

Delivery Model Five: The proposed model is Regional Clusters.

- Following input from the Board at the CTE Workshops, the recommended model builds on the strengths of each of these models while seeking to minimize the weaknesses of those models with regard to access and cost.
- The model also utilizes each of the studies the board commissioned and the work of Drs. Johnson Martin and Julia Stewart.

The Proposed Model: Regional Clusters

- With the Board's input, the Administration proposes the establishment of Regional Clusters for CTE Programs across the School District.
 - Access: All students in PPS will have access to quality CTE programs within each region.
 - Cost: While some capital expenditures will be needed, the proposal maximizes the utility existing programmatic CTE spaces throughout the district.

Every Student within PPS will have access to three CTE programs.

- All three Regional Clusters will have three programs available to all students:
 - Health Careers
 - Information Technology, Business and Finance
 - Culinary Arts

Regional Clusters for CTE are proposed as follows:

- East Regional Cluster:
 - Alderdice, Milliones-University Prep, Peabody, and Westinghouse
- North Regional Cluster
 - Oliver and Perry
- South/West Regional Cluster
 - Brashear, Carrick, and Langley

Additional signature programming will exist in each Regional Cluster because of existing infrastructure or facility capacity.

- **East Regional Cluster**
 - Robotics Technology
- **North Regional Cluster**
 - Refrigeration, Heating, Ventilation, Air Conditioning and Cooling (RHVAC)
 - Cosmetology
- **South/West Regional Cluster**
 - Auto Body Repair
 - Automotive Technology
 - Advanced Machine Operations

Access to signature programming will be constrained within the three regions.

- A student who wishes to access signature programming must attend a school within the region where the specialized programming is offered.
- Should the Board approve this model, we propose creating a new process for students who wish to transfer into a region that would offer the CTE program of their choice.
- We will also test the demand for extended day, weekend or summer opportunities from students across the district outside of normal school hours at two CTE sites: Brashear and Oliver.

Student daily schedules give students a great deal of flexibility.

- Students would have their academic classes at their home school on either a morning or an afternoon schedule.
 - Student Daily Schedule:
 - Morning or Afternoon: At your home school
 - Morning or Afternoon: At the Regional Center.
 - Student flexibility:
 - If student is an athlete, he/she would be required to utilize the morning at the CTE site and the afternoon in classes at his/her home school.

Transportation within clusters will be provided on PPS shuttle busses.

- Students would travel by Port Authority to and from school but by “school shuttle” between schools in the middle of the day .
- Transportation Shuttles would be provided for students during the day.
 - Students take Port Authority in the AM
 - Midday-Shuttles would operate within the cluster and to bring students from the Teacher’s Center.
 - End of the day transportation for students would not be altered under this proposal.

Transportation time is minimized within the regional clusters.

- A shuttle within each region can make the rotation within 45 minutes.
 - This transportation time is equivalent to one class period.
 - Note this time period aligns with the findings of the DeJong study with respect to parental expectations for travel time for High School Students.
- All CTE students can meet both the graduation requirements and the CTE hours required for certification within PPS with this schedule. (See attached).

East Regional Cluster

Allderdice
Milliones, University Preparatory School
Peabody
Westinghouse

East Region-Allderdice

- Pittsburgh Allderdice would remain a comprehensive high school serving grades 9-12 and continue to house **the Engineering Magnet**.
 - **The program will remain a magnet program** and student access will be limited to those admitted by the magnet process.
 - Within the Engineering Magnet, students who would like to obtain the CTE certification may do so by adhering to the Chapter 339 programming and time requirements.
 - Other Allderdice students may, however, attend other CTE programs in the region.

East Region: Advisory Committee

- **An East Region Advisory Committee** was convened to determine what the configurations, themes and/or models that the schools in this region of the city of Pittsburgh would comprise.
- The secondary schools involved here include those schools under capacity in the East Region:
 - Pittsburgh Milliones, University Preparatory School
 - Pittsburgh Peabody
 - Pittsburgh Westinghouse

East Region: Advisory Committee

- Currently, under consideration are several ideas in each of these areas for the Peabody or Westinghouse facility:
 - *Configurations: 9-12 or 6-12*
 - *Themes: Leadership; Social Justice; Sports Sciences; Health Sciences*
 - *Models: Single Gender; Extended Day and Extended Year*

East Region-Milliones, University Preparatory School

- In addition to its college preparatory focus, Pittsburgh Milliones, A University Preparatory School will continue to serve grades 6-12 and will house the **Information Technology, Business and Finance programs.**
 - University Preparatory School is a wireless networking environment and will house this program in its renovated floors that house students grades 10-12.
 - **Note: This CTE program will not be a magnet program.**

East Region- Peabody

- The lower level of the Peabody Building was renovated in 2008-09 to house the **Robotics Technology program**.
 - Pending recommendations that have been made to the Superintendent for the location of Obama ISA 6-12 and the impending recommendations of the East Region Advisory Committee, the site may continue to house the Robotics Program.
- An alternate location for the program would be Pittsburgh Alderdice where the companion Engineering magnet will remain in operation.
- **Note: Within the proposed Regional Cluster framework, the Robotics Program would no longer be a magnet.**

East Region-Westinghouse

- The completed renovation of Westinghouse in 2003 resulted in a capital expenditure of more than \$30 million.
- Two CTE programs are compatible with the programs under consideration for the site.
 - **Culinary Arts at Westinghouse:** Westinghouse currently has a solid culinary arts program, and within the newly renovated space, Westinghouse has a state of the art facility for the program.
 - **Health Careers at Westinghouse:** The infrastructure for a full Health Clinic currently exists within the Westinghouse facility.
 - Partnerships with both UPMC and West Penn Allegheny are being explored.
 - A full-service Community Health Clinic for students and families could conceivably exist within Westinghouse in the near future.

North Regional Cluster

Oliver
Perry

North Region: Gateway to the Promise Center-Early College at Oliver

- Having failed to make AYP since 2002, Pittsburgh Oliver is currently in Corrective Action 2, Year 3.
- This proposal restructures Pittsburgh Oliver by adopting the Early College, serving grades 9-12.
- In addition to the college preparatory program, this model would also contain Career Academies for all students linked to certificated programs with post-secondary institutions.

Every student at the Gateway Center will select a specific Career and Technical Education Academy.

- The Gateway Center will house the following Career Academies which will lead to CTE Certification and attendant post-secondary options:
 - **Building and Trades Academy**
 - HVAC
 - Welding
 - **Health Careers Academy**
 - **Information Technology, Business and Finance Academy**
 - **Consumer Sciences Academy**
 - Culinary Arts
 - Cosmetology

The Gateway-Early College Center is designed as a small school with intensive student support.

- The Center was conceived as a part of the Multiple Education Pathways partnership among PPS, the City of Pittsburgh and the Three Rivers Workforce Investment Board.
- Each student will have a personalized education plan that addresses their individual challenges and concerns.

The Gateway-Early College Center has a year-round schedule.

- The Year-Round Schedule builds in time for acceleration and remediation.
 - A motivated student can acquire all of the credits for a high school diploma by the end of his/her junior year and enroll in a post-secondary program.
 - Students who require additional time to master college readiness or workplace skills have additional time and resources embedded in the schedule.

The Gateway – Early College Center will offer flexible hours of scheduling.

- To accommodate the challenges that many of our students face, students may attend school in flexible hours.
- Timeframes that are being explored include:
 - 8 am to 4 pm
 - 10 am to 6 pm
 - 12 pm to 8 pm

The Gateway Center will serve PPS students in three major areas.

1. The Gateway-Early College Center will serve as a feeder pattern 9-12 school for students on the North-side.
2. Through a systematic referral process all PPS secondary schools, the Gateway Center will also serve as the site for credit recovery for students who have fallen behind earning credits and are at-risk of dropping out.
3. The Gateway Center will also seek to reclaim students who have dropped out of high school.

North Region: Empowering Effective Teacher's Center at Perry

- In a subsequent presentation, the Administration will recommend to the Board of Directors that the Empowering Effective Teacher's Center for grades 9-12, which is referenced in the Empowering Effective Teacher's proposal to the Bill & Melinda Gates Foundation, be placed at Perry Traditional Academy.
 - Students at the Teacher's Center would be able to access programs at the Gateway Center via shuttle

South/West Regional Cluster

Brashear

Carrick

Langley

South/West Region-Brashear

- Pittsburgh Brashear would remain a comprehensive high school serving grades 9-12 and house the Transportation CTE programs:
 - **Auto Body Repair**
 - **Automotive Technology**
- Note that these are signature programs that can only be accessed within the region by students during the regular school day.
 - As noted above, an extended day, weekend and summer schedule is being explored to offer this to students in other regions.

South/West Region- Carrick

- Pittsburgh Carrick would remain a comprehensive high school serving grades 9-12 and house two programs:
 - Information Technology, Business and Finance
 - Culinary Arts
- **Note: Within the proposed Regional Cluster framework, the Information Technology, Business and Finance Program would no longer be a magnet.**

South/West Region: Big Picture Learning at Langley

- Utilizing the nationally recognized *Big Picture Learning* framework, Pittsburgh Langley will be restructured to serve the students in the West End.
- Dr. Elliot Washor, Co-Founder and Co-Director of Big Picture Learning will present the framework this evening.
- The school would house two CTE programs
 - Health Careers
 - **Advanced Machine Operations (Signature Program)**

Projected Capital Costs for CTE at all of the enumerated sites.

- The proposed capital budget for this comprehensive plan has been estimated at \$38,043,123.
 - A schedule for costs per building was included in the February 10th plan on page 33.
- NOTE: The Administration arrived at this estimate by re-prioritizing capital projects and expenditures throughout the district over the next several years.
 - NOTE: A significant portion of this total is the Gateway-Early College Center at Oliver. In light of the proposed year-round program, the building will require building upgrades which include air conditioning.
 - Note that this estimate does not include any renovations needed to ready Pittsburgh Perry as the Empowering Effective Teacher's Center.

Transportation costs have been estimated within each region.

- The total additional costs for the operation of shuttles within all regions per year is estimated at \$147,600.
 - East Region--\$480/day or \$86,400/year
 - South/West Region--\$240/day or \$43,200/year
 - North Region -- \$100/day or \$18,000/year
- Port Authority costs for bus passes for the estimated 600 students is estimated at \$480,000.

Communications and Marketing Plan for CTE

- Last year, the Board authorized the production of marketing materials for the CTE programs within the school district.
- Within your presentation materials, and on display, you will find an example of what those materials will look like for students and their parents as they seek to make informed choices about PPS programming.

Big Picture Learning

- Presentation by Elliot Washor, Ed. D.
 - Co-Founder and Co-Director of Big Picture Learning

Questions and Comments