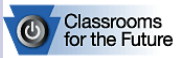


# Classrooms for the Future

Pennsylvania Department of Education

Edward G. Rendell, Governor  
Gerald Zahorchak, Secretary of Education




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## Classrooms for the Future: PA's Bold High School Reform Initiative for the 21<sup>st</sup> Century

- Prepare students:
  - To compete in a global market
  - To thrive in
    - An information-rich world
    - A constantly changing world
    - A technology-rich world
- Redesign HS to meet student's needs




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## Millennial Students



DICK LOCHER / Chicago Tribune (Tony Auth has the day off.)

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## High School Reform in PA

- Project 720
- Dual Enrollment
- Commission for College and Career Success
- Pennsylvania Inspired Leadership
- Pennsylvania High School Coaching Initiative
- Classrooms for the Future




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## School 1.0

- Teacher Centered
- Content coverage
- Memorizing information
- Lecturer
- Whole group configuration
- Single instructional and learning modality
- Memorization and recall
- Single discipline
- Isolated
- Textbook dependent
- Teachers teaching to one learning style
- Learning content
- Learning isolated skills and factoids
- Acting purely as a student

## School 2.0

- Learner Centered
- Learning and Doing
- Using Information
- Facilitator
- Flexible grouping configuration
- Multiple Instructional and learning modalities to include all students
- Higher Order Thinking Skills - creativity
- Interdisciplinary
- Collaborative
- Multiple sources of information
- Teachers addressing multiple learning styles
- Learning how to learn
- Completing authentic projects
- Acting as professional in the discipline

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## Major Goals: Classrooms for the Future

- Improve teaching and learning in English, math, science, and social studies.
- Change classroom practice.
- Change student-teacher relationships.
- Increase student engagement and attendance.
- Students responsible for learning.
- Students developing 21st century skills.
- Increase academic achievement.




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## Year 1 Implementation (06-07)

- ❑ \$20 Million + \$6 Million for Professional Development
- ❑ 103 schools in 79 districts
  - Urban, suburban, rural, small, large
  - Readiness to embrace reform
- ❑ 16,000 computers in 1200 classrooms



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## "Smart" Classrooms

Each public high school and AVTS/CTC core subject (English, Math, Science, Social Studies) classroom the following:

- ❑ one laptop per student desk (cart of 30)
- ❑ a teacher laptop
- ❑ a printer/scanner
- ❑ imaging software
- ❑ productivity software
- ❑ a web cam
- ❑ an electronic whiteboard
- ❑ a projector
- ❑ up to three digital still cameras
- ❑ up to five digital video cameras



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## Funding for....

- ❑ State Equipment Contract – Mac or PC
- ❑ Student laptops
- ❑ Building infrastructure
- ❑ Classroom technical support
- ❑ Additional funding for coach salary
- ❑ "Smart" classrooms and teacher stations

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## Key to Success: Professional Development

Extensive, on-going, job-embedded professional development emphasizing:

- Leadership – principals, administrators
- Teachers
  - Face to Face workshops
  - Vendor provided
  - On-line job-embedded courses
- Instructional Technology Coaches



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## On-line Job-embedded Courses

- 21<sup>st</sup> Century Teaching and Learning courses (30 hours each year – participating teachers)
  - The Need for Change
  - Authentic teaching and learning in Math, English, Social Studies and Science Classrooms
  - Differentiated Instruction
  - Inquiry-based learning
  - Project-based learning



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## Instructional Technology Coaches

- Support teachers
  - In class modeling
  - Just in time learning
- Coach Training
  - “Bootcamp”
  - Vendor workshops
  - Webinars
  - Electronic community



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### Key to Success: Leadership Implementation Teams

- ❑ Central office
- ❑ Principals
- ❑ Technology leaders
- ❑ Coaches
- ❑ Lead teachers
- ❑ Unions



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### Winning Strategy for CFF

- ❑ CFF as an extension of high school reform initiatives.
- ❑ Cohort 1 schools become ambassadors for CFF.
- ❑ Legislators witness the transformation in schools and classrooms.



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### Classrooms for the Future: Year 2 (06-07)

- ❑ \$90 Million + \$13 Million = \$103 Million
- ❑ Adding 254 additional schools (total 357 schools for year 2)
- ❑ 611 Eligible entities in Pennsylvania
  - ❑ Public high schools
  - ❑ Comprehensive AVTS

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### CFF Impact – student engagement

“Classrooms for the Future clearly enhances the educational experience. It provides enough variation to hold the students' attention, and the interactive nature of the technology keeps their interest.”

“In the past three months, I have seen my students more engaged and more invested in their learning than in years past. They have told me they see the activities applicable to the real world! I am thrilled.”



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### CFF Impact – student motivation

“Already, I have noticed that technology in the classroom is really motivating the students.”

“The feel of the room has changed in that the students feel that they are able to manipulate more of the information making them more connected to it.”



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### CFF Impact

“Thank you again for the CFF program. All of our students will benefit from this initiative, but we are especially grateful for the chance to reach students who don't always respond to traditional teaching.”



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## CFF Impact – teacher practice

“This has opened up a whole new world of differentiated instruction that we didn’t have before the laptops, electronic white boards, etc.

We can have thirty kids, working on thirty things and all benefiting from the classroom experience in that they get to share their individual findings and results to research.”



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## CFF Impact - teachers

“This is my 34th year of teaching and I have seen many initiatives throughout my career; however, I don’t think that any one has ever made as profound of an impact as that of the integration of technology into our classrooms.”

“After 14 years of teaching, I honestly believe there is a change on the horizon and this is not just a trend.”



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## CFF Impact – professional development

“As part of my involvement in the grant, I have been participating in a course on 21st century education, and I now truly believe we must change our thinking and our instruction if we are to serve the needs of our students in today’s world.”



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**Evaluation**

- Program requirement
- Penn State University – Lead Evaluation Team
- Instruments
  - Case studies
  - Teacher surveys
  - Student surveys
  - Interviews, principal, coach, project manager



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**A Glimpse into some Classrooms for the Future**

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**Questions???**

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**For more information:**

Classrooms for the Future on ED Hub:

[www.pde.state.pa.us/edhub](http://www.pde.state.pa.us/edhub)

Video of CFF in the Norristown Area School District

[www.nasd.k12.pa.us/media/cff.wmv](http://www.nasd.k12.pa.us/media/cff.wmv)

Contact: Holly Jobe, Project Manager

[c-hjobe@state.pa.us](mailto:c-hjobe@state.pa.us)

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