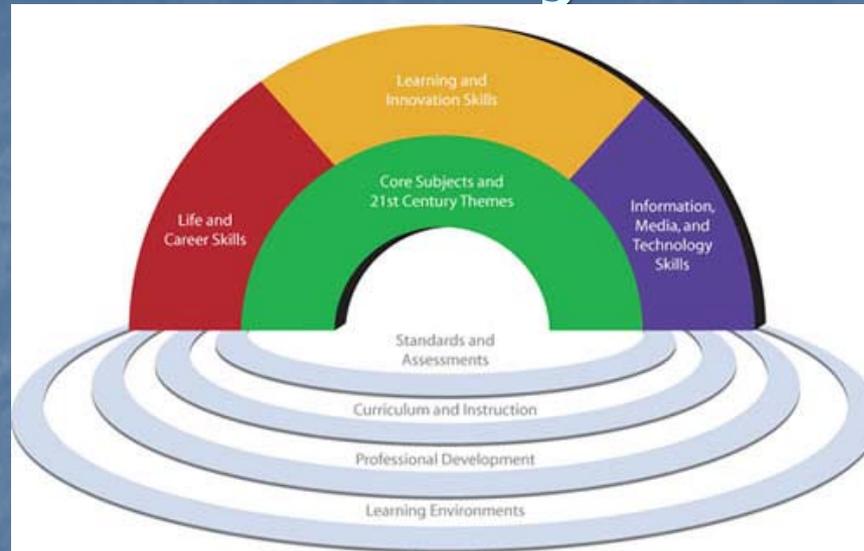


21st Century Skills...



...to make our high school curriculum more rigorous, more meaningful, and more relevant to today's students.

January 19, 2010 Report to the Combined
Board of Education and City Council Meeting
Presented by: Mary N. Cortright

Trends we look at to determine future needs

- Automation
- Globalization
- Workplace Change
- Demographic Change
- Personal Rights and Responsibility

21st Century Challenges

- New global labor market
- Developing countries are producing large numbers of high skilled low cost workers
- Internet makes workers available to the world's employers
- Successful firms in the future will focus on creative work

What students need to be successful in our 21st Century

- All students must be prepared for college or advance training
- All students will need a deep knowledge of a subject area in order to answer the critical higher order thinking questions of "How and Why"
- All students will need a focused curriculum, not a narrow one

Three kinds of learning are necessary

- Traditional academic knowledge and skills
- "Real World" application or "Applied Literacies"
- Broader competencies

Core Subjects and 21st Century Themes

Core Subjects

- English, Reading, Language Arts
- Arts
- Mathematics
- Economics
- Geography
- History
- Government and Civics

21st Century Themes

- Global Awareness
- Financial Literacy
- Economic Literacy
- Business Literacy
- Entrepreneurial Literacy
- Civic Literacy
- Health Literacy

Collaboration in the 21st Century

- **Learning and Innovation Skills**

 - Creativity and innovation skills

 - Critical thinking and problem solving skills

 - Communication and collaboration skills

- **Information, Media and Technology Skills**

 - Information literacy

 - Media literacy

 - ICT (Information and Communications Technology) literacy

- **Life and Career Skills**

 - Flexibility and adaptability

 - Initiative and self-direction

 - Social and cross-cultural skills

 - Productivity and accountability

 - Leadership and responsibility

Learning Pyramid



21st Century Learning Environments

- Support the teaching and learning of 21st Century skill outcomes
- Foster collaboration among educators
- Engage students in project-based learning or other applied work
- Promote equitable access to quality learning tools, technologies and resources
- Provide 21st Century architectural and interior designs

Technology Needs

- Ensure that schools are equipped with a 21st Century technology infrastructure and technology tools
- Support access for all students to technology and the Internet
- Provide students and educators access to cutting-edge digital applications and services
- Encourage incorporation of information, media and technology literacy into the curriculum

Technology Resources in a 21st Century School

A classroom fully equipped with tools and materials is more likely to achieve success than a poorly resourced one

- Learning and content management systems
- Educationally focused software
- Interactive whiteboards
- Classroom desktop computers
- Pods of laptops for one to one or cooperative learning
- PDA's, iPods and cell phones
- Video and audio conferencing
- Cameras, videos, tripods, microphones, speakers, headphones
- Media production facilities

A Ninth Grade Academy. . .

- Is a school within a school
- Gives students a sense of belonging, a connection to the school and its programs and activities
- Takes the fear or overwhelming sense out of high school
- Provides a smooth transition from middle school to high school

9th Grade Academies within the High Schools

Some noted **Benefits to Students** include:

- increased academic achievement
- reduced discrepancies in the achievement gap
- increased student attendance, improved attitudes and behavior and reduced isolation
- promotion of positive feelings about self and others
- increased number of students matriculating to 10th grade
- lower student drop out rate
- development of student awareness of academic/career options

In Summary, 21st Century Classrooms should...

- Allow for collaborators and communicators (furnishings and technology designed to be rearranged with ease and speed to foster group collaboration).
- Be easily configurable for various learning activities.
- Be adaptable to the rapid advances in technology, linked with reduced costs and increased connectivity, are changing our students, who are learning new things in new ways.

**“...if we teach today as we taught yesterday,
we rob our children of tomorrow.”**

John Dewey (1933)



Resources

- Partnership for 21st Century Skills (www.21stcenturyskills.org.)
- Andrew Churches, Factors for 21st Century Technology Integration
- <http://www.21centuryconnections.com/node/538>
- Blog: <http://edorigami.wikispaces.com/>
- Marc Prenksy, Digital native, Digital Immigrants Parts I and II, NCB University Press,
- Vol. 9 No. 5, October 2001
<http://edorigami.wikispaces.com/Readings>
- Dr, Chris Moersch, What is LoTI. <http://www.drchrismoersch.com/>
- Level of Technology Implementation (LOTI) scale
(<http://edorigami.wikispaces.com/LOTI>)
- 21st Century Connections web site
- <http://www.21centuryconnections.com>