GEARING UP FOR CHANGE

Transforming a School District one Facility at a time

CEFPI International Conference 2008
Amy Yurko, BrainSpaces
Peter Brown, BrainSpaces
Dr. George Copa, New Designs for Learning
Michael Carlson, McCool Carlson Green Architects
GEARING UP FOR CHANGE

• Why Change?
• Context for Change
• Preparing for Change
• Organizing for Change
• Designing for Change
• Bringing it all together
Why Change?

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Amy Yurko, AIA
Did you know?

Sixty five percent of the children in preschool today will work in jobs that do not yet exist.

Why Change?
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“Innovation comes naturally to those organizations that are focused on the opportunities of tomorrow rather than the challenges of today.”

- Jim Carroll, Futurist, Innovation Consultant
students

• *Two Million Minutes,* vividly reveals that American students are no longer “at risk” of falling behind -- they are now clearly behind even Third World students in India and China, in addition to being in 24th place among developed countries.

• By comparing how these students prioritize their time (approximately four years or “two million minutes” of high school), the film demonstrates that the typical student in the U.S. spends much less time on his/her education and gives less thought to future career opportunities than his/her global peers in India and China.

  – Source: http://www.2mminutes.com/pressblog6.html

Why Change?
“Teenagers in a majority of industrialized nations taking part in a leading international exam showed greater scientific understanding than students in the United States—and they far surpassed their American peers in mathematics.”

Source: Education Week, 12.4.07
USA Treading Water in Reading

Bloomberg News Service

“Russia, Hong Kong and Singapore shot to the top of 45 countries and provinces participating in a fourth-grade reading test, while England fell below the United States, according to results released yesterday.”

Source: Honolulu Advertiser, November 29, 2007
Virtual World, Real Money

Anshe Chung has become the first online personality to achieve a net worth exceeding one million US dollars from profits entirely earned inside a virtual world.

--Business Week, May, 2006

Why Change?
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Digital Citizenship

• Living in the digital world
  – Consumers
  – Citizens
  – Community Leaders

• Making a living in the digital world
  – Digital workers
  – Global workers

• (Re)creating the digital world
  – Innovators
  – Entrepreneurs

Why Change?
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When I was growing up, my parents told me, “Finish your dinner. People in China and India are starving.” I tell my daughters, “Finish your homework. People in India and China are starving for your job.”

---Thomas Friedman, 2005
Finding Our Niche

Today, Indian engineers make $7,500 a year against $45,000 for an American engineer with the same qualifications.

If we succeed in matching the very high levels of mastery of mathematics and science of these Indian engineers — an enormous challenge for this country — why would the world’s employers pay us more than they have to pay the Indians to do their work?

They would be willing to do that only if we could offer something that the Chinese and Indians, and others, cannot.

Finding Our Niche

Therefore we need to move into niche areas where they will not be able to completely replace us for quite some time.
Finding Our Niche

In the global economy, our student’s careers are global. Where they can find employment depends on their niche talents.
a new “age”?

A Whole New Mind: 
Moving from the Information Age to the Conceptual Age

Why Change?
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A Whole New Mind

Information Age
- Sequential
- Literal
- Functional
- Textual
- Analytic

Conceptual Age
- Simultaneous
- Metaphorical
- Aesthetic
- Contextual
- Synthetic

Why Change?
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Essential Aptitudes in the Conceptual Age

• Design
• Story
• Symphony
• Empathy
• Play
• Meaning

Why Change?
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Implications for Education

Are we preparing citizens for the globalized world?

• Unique talents
• Creativity, Imagination, and Passion
• Cross-cultural competencies
  – Understanding the globe
  – Foreign languages
  – Understanding other cultures
• Global responsibilities
Implications for Education

Schools as Global Enterprises

• Global products
• Global resources
• Blend virtual and physical spaces
Implications for Education

3Es

• experience
• explore
• engage
Help Wanted ads in the Flat World

- Collaborators & Orchestrators
- Synthesizers
- Explainers
- Leveragers
- Adapters
- Green People
- Passionate Personalizers
- Math Lovers
- Localizers

Why Change?

Source: The World is Flat by Thomas L. Friedman

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CONTEX for CHANGE

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Michael Carlson, AIA
2010!
Preparation for Change

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George Copa, PhD
MAT-SU CAREER/TECH HIGH SCHOOL

• Learner Population: 500 FTE
• Building Area: 76,550 gross square feet
• Full time high school plus part time students
• Career Pathways
  – Pathway #1: IT/Business/Electronics
  – Pathway #2: Arch/Engineering/Construction
  – Pathway #3: Culinary Arts/Hospitality
  – Pathway #4: Health Sciences/Nursing
  – Pathway #5: P.E./Sports Science

Why Change?
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LEARNING BEFORE FACILITIES

Learning Plan

Facility Plan

Effort

Time

Why Change?

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LIFTING THE PLANNING HORIZON

- Innovative Practices
  -- Learning
  -- Learning Environments
- Mid-point in Facility Life
- Other Social and Economic Sectors
- National and International Scene

Why Change?
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EMERGING IDEAS

- Engagement
- Personalization
- Connectivity
- Authenticity
- Technological Enhancement
- Lifelong Learning
- Sustainability
THINK COMPREHENSIVE & SYSTEMATIC

Design Elements
- Learning Context
- Learning Audience
- Learning Signature
- Learning Expectations
- Learning Process
- Learning Organization
- Learning Partnerships
- Learning Staff
- Learning Environment
- Learning Accountability
- Learning Celebration

Why Change?
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THINK INCLUSIVE AND LONG TERM

Learning Audience (Individuals)

- Full-time learners
- Part-time learners
- Remote learners
- Adult learners
THINK INCLUSIVELY AND LONG TERM

Learning Audience (Beyond Individuals)

• Higher education
• Business and industry
• Organized labor
• Social agencies
• Government

Why Change?
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THINK INCLUSIVELY AND LONG TERM

Learning Places

- Physical
  - School
  - Community
  - Home
- Virtual

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EXPECT TRANSITIONS

- Daily, weekly (flexibility)
- Monthly, quarterly (adaptability)
- Expansion/constriction
- Not over-designed/finished
- Phasing
- Contingency
- Mixed use, multiple-use
- Re-development
EXPECT CHANGE

Modular Infrastructure

- Individual
- Small group
- Large group
- Resource (technology, library, materials)
- Studio (practice, projects, production)

Why Change?

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MAXIMIZE PARTNERSHIPS

- Other School Entities
- Business and Industry
- Community
- Parents and Family
- Social Agencies
ENGAGE

Borough

Organized Labor

Why Change?

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MULTIPLE SOURCES OF EVIDENCE

- Research and Development
- Promising Practices
- Leadership Thinking
- Local Experience and Assets
CONSENSUS DOCUMENTS

Why Change?
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LOCAL LEADERSHIP

Why Change?

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INVOLVE STAKEHOLDERS

- Students
- Parents and Families
- Teachers
- Other School Staff
- Administrators
- Board Member
- Business and Industry
- Organized Labor
- Government
- Community
- Higher Education
STUDENT PARTICIPATION

Why Change?
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FOCUS RESPONSIBILITY

Design Team
Meetings

Community Input
Accomplishments and Initiatives

Staff and Student Input
Research and Promising Practices

Learning Plan

Why Change?
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CAREFUL ANALYSIS

• Clear and straightforward questions
• Individual time for thinking and responding
• Small group sharing and recording (nominal group process)
• Small group reporting (let them do the talking)
• Priority setting process
• Careful recording
• Interpretive research analysis and synthesis
• Opportunity to review and revise
Why Change?

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ORGANIZING for CHANGE

McCool Carlson Green Architects
New Designs For Learning
BrainSpaces

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Peter Brown, AIA
ORGANIZING FOR CHANGE

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Peter Brown, AIA - BrainSpaces
Two Case Studies

• Su Valley Middle High School

• Barnette Magnet

Why Change?

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Program-Driven Schools

Why Change?

programming  planning  design
Maximizing School Investment

- good for students
- good for teachers
- good for the community

Why Change?
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Multiple Stakeholders

Why Change?

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Performance Drivers

- Daylighting
- Acoustics
- Indoor Air Quality
- Ergonomics
- Color
- School Size
Planning Drivers

- Collaborate
- Interact
- Communicate
- Gather
- Program Synergy
7 Common Planning Goals

- Anticipating Change
- Flexible and Agile
- Multiple Resources
- Safe and Secure
- Technology
- Sustainable
- Performance Driven
Case Study No. 1: SU VALLEY JR/SR HIGH SCHOOL

- Replacement due to fire
- Combined Middle & High School
- 250 students / 40 per grade
- 50,750 sf total area
- $18 million construction budget
- Occupancy 2009
Background
Two Components: Public and Academic

Why Change?

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School as a Community Center

Why Change?

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Flexible Center within the School
Library CAFE

Why Change?

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Performance Center

"ACADEMIC CENTER"

"COMMUNITY CENTER"

STAGE

MUSIC

Main Entry

Why Change?

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Learning Center
Academics

Why Change?
5 Key Ideas: Su Valley JR/SR High

- School as community center
- Small schools bring big opportunities
- Library Café as heart of school
- Applied arts integrated into academics
- Student informal space

Why Change?
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Case Study 2: BARNETTE MAGNET SCHOOL

- Magnet Program / School of Choice
- 16 Core groups in mornings
- 32 Exploratory groups in afternoons
- Grade Levels: K-8
- Design Capacity:
  - 440 full time students / 48 per grade
  - 30+ half time students
- Building Size: 54,400 square feet

Why Change?
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Program Diagram

Why Change?

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Program Description

core classes

exploratory
Facility Utilization: Strategy A

Classroom Classroom Classroom Classroom Classroom Classroom Classroom Classroom

Classroom Classroom Classroom Classroom Classroom Classroom K Classroom K Classroom

LARGE STUDIO LARGE STUDIO LARGE STUDIO EXPLORATORY KITCHEN

SMALL STUDIO SMALL STUDIO SMALL STUDIO SMALL STUDIO

DANCE MUSIC

Why Change?

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Facility Utilization: Strategy B

Why Change?
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Why Change?

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Learning Studio

Why Change?

CEFPI Conference 2008
Learning Studios

Why Change?

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Media Center

Why Change?

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Gym, Dance, and Exhibit Nights

Why Change?

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5 Key Ideas: Barnette Magnet School

• Schedule utilization influences planning
• Increase resources for classrooms
• Reinforce and enhance school culture
• Allow varying group sizes
• Plan for alternative uses: “Loose Fit”
McCool Carlson Green Architects
New Designs For Learning BrainSpaces

DESIGNING for CHANGE

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Michael Carlson, AIA
ACKNOWLEDGE GROWTH
OPEN ENDED DESIGN

Staff Parking

Future Expansion

Construction Yard

Career Center

Public Parking

Vehicle Drop-Off

Bus Drop-Off

Access Road
PLAN FUTURE CONNECTIONS
FLEXIBLE PLANNING GRID

Why Change?

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ALTERNATE LAYOUTS

Why Change?
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PATHWAY ANATOMY

Why Change?

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Operable Walls create multiple configuration opportunities.

Overhead Door provides access for large equipment and displays.

Operable Walls, Classrooms & Informal Learning

Why Change?

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ACESSIBLE INFRASTRUCTURE

Why Change?

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HOW DO YOU SHARE A CLASSROOM?
WHAT TO DO WITH UNDERSIZED CLASSROOMS?

Why Change?
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DAILY TRANSFORMATION

Morning
Core Classrooms

Exploratories

Why Change?
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McCool Carlson Green Architects
New Designs For Learning
BrainSpaces

Bringing it all Together
Thank you for participating

BrainSpaces
McCool Carlson Green Architects
New Designs for Learning

Come to Alaska in 2010
PNW Regional Conference

Why Change?

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