

Integrating Technology  
Competencies into the K-12  
Curriculum for All Students  
State College Area School District



Understanding the Change  
Process

- ◆ The goal is not to innovate the most.
- ◆ It is not enough to have the best ideas.
- ◆ Appreciate the implementation dip.
- ◆ Redefine resistance.
- ◆ Reculturing is the name of the game.
- ◆ Never a checklist, always complexity.

Michael Fullan




## Planning

- ◆ Strategic Planning
- ◆ Strategic Commitment
- ◆ Organizational Readiness




## Goals

- ◆ Students will become comfortable, competent users of technology
- ◆ ALL students will master ALL skills
- ◆ Technology competence will be viewed as a component of literacy



## Strategies

- ◆ Instruction integrated into the curriculum
- ◆ Curriculum taught by “classroom” teachers
- ◆ Independent assessment at 2, 4, 6, 8, 10
- ◆ Continuous process improvement - data driven



## Implementation 97-98

- ◆ Identified student technology competencies as a main “so what” of technology effort
- ◆ Defined and categorized competencies and skills (IRMA)
- ◆ Delivered intensive technology staff development program (EAA grant)

## State College Area School District - Integrating Technology Competencies



### Implementation 98-99

- ◆ Developed detailed project implementation plan
- ◆ Received TLCF grant to fund the Technology Competencies Integration Project
- ◆ Identified conversion teams and converted lessons which integrated the technology competencies



### Implementation 99-00

- ◆ Trained pilot teachers, using lessons
- ◆ 70 teachers piloted lessons, K-10
- ◆ Developed and piloted assessments at grades 2, 4, 6.
- ◆ Revised competencies and lessons based upon feedback from pilot teachers (became an annual process)

## State College Area School District - Integrating Technology Competencies




### Implementation 00-01

- ◆ 190 teachers voluntarily participated - benchmark class in 6th grade
- ◆ Assessed all students in grades 2, 4, 6 - started data collection
- ◆ Shared summary results with teachers



### Implementation 01-02

- ◆ Reached full implementation with 240 teachers delivering instruction grades K-10
- ◆ Began parent reporting to grades 2, 4 & 6
- ◆ Developed reteaching strategies for students not achieving complete mastery




## Implementation 02-03

- ◆ Developed strategies and processes for special education students
- ◆ Assessed all students in grades 2, 4, 6, 8 & 10
- ◆ Reported results to parents of students in grades 2, 4, 6 & 8 (benchmark class)



## 02-03 Results

- ◆ 2nd - 99% achieved 100% mastery (7 competencies)
- ◆ 4th - 98% achieved 100% mastery (9 competencies)
- ◆ 6th - 64% achieved 100% mastery (21)  
86% achieved 85% mastery (18 or more)
- ◆ 8th - 24% achieved 100% mastery (20)  
60% achieved 85% mastery (17 or more)



## Keys to Success

- ◆ Lay the groundwork; insure broad support
- ◆ Convert.... do not add curriculum; involve teachers
- ◆ Assess independently
- ◆ Share results for improved instruction




## Keys to Success

- ◆ Dedicate(d) leadership to project
- ◆ Support, Support, Support
- ◆ “Stay the course” while making continuous improvement



## Lessons Learned

- ◆ Teacher resistance is related to degree of competence and comfort.
- ◆ The concepts of mastery learning and “all students” fundamentally change thinking about student performance.
- ◆ Articulate entire curriculum.



## (Un)intended consequences

- ◆ Extension activities
- ◆ Increased teacher competence
- ◆ Model for data-based decision making





## Board Perspective

- ◆ Keep focused on student competencies
- ◆ Goal is to facilitate systemic change in the district
- ◆ Process is key:
  - Board discussions and education
  - Strategic planning
  - Implementation
- ◆ Be committed to ongoing funding
  - Staff
  - Training
  - Equipment



## To access documents related to this presentation:

- ◆ Visit [www.scasd.org](http://www.scasd.org)
- ◆ From the Academics channel, select Technology Competencies
- ◆ Click Resources and Samples