

A Penny Saved

How Schools and Districts Can Tighten
Their Belts While Serving Students Better

American Enterprise Institute

Thomas B. Fordham Institute

January 11, 2010

The collected papers from this conference are available online at
www.aei.org/event/100164.



More Productive Schools Through Online Learning

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The Problem and the Opportunity

- Hawai'i vs. General Motors
- High Spending/Mediocre Results
- Out of economic crisis comes what?
- Productivity gains or more of the same?

The “Technology” of Education in 2010

- Teacher/Labor Intensive
 - Teachers 50% of school budgets
 - Instructional personnel 70% of school budgets
- Whole Group Instruction
 - Teacher led classrooms cannot address heterogeneity of students
 - De-motivating for many: fear of failure
 - Miss-paced for many
 - No time for guided practice
 - No time for mastery
 - Teacher quality mediocre

The Potential of Instructional Technology

- Student Advantages
 - Multi-media
 - Self-pacing
 - Interactivity
 - Guided Practice
 - Response to Intervention
 - Personalized Teaching
 - Special Needs
 - Cognitive Training
- Teacher Advantages
 - Heavy Lifting Handled by Technology
 - Teachers “just teach”
- Three decades of experience and evidence

The Economics of Online Education: Instructional Labor

- Online Charter School Student: Educator Ratios
 - Asynchronous Graders 200:1
 - Advisors 60:1
 - Synchronous Tutors 150:1
 - Synchronous Teachers 200:1
 - Overall 35:1
- Brick and Mortar Student: Educator Ratios
 - Teachers 15.8:1
 - Overall 13:1

The Economics of Online Education: Share of School Budgets (assuming full funding)

Input	Brick/Mortar	Online	(Savings)
Teachers	52%	26%	(26%)
Transport and Food	7%	2%	(5%)
Computers and Internet	2% [4:1]	10% [1:1]	8%
Curriculum	3%	25%	22%
Totals	64%	73%	(11%)

Hybrid Schools

- In the future...most kids will still go to school
- But schools will be different, mixing face to face and online instruction
- Online
 - Remediation
 - Acceleration
 - Gateway courses such as Algebra I
 - Varied by age and learning style
 - Teacher shortage classes
 - Whole classes and part of classes

Economics of Hybrid Schools

- Simple Model
 - 6 hour school day
 - K-5: 1 hour per day online, supervision: 2 classes/1 teacher
 - 6-8: 2 hours per day online, supervision: 2 classes/1 teacher
 - 9-12: 3 hours per day online, supervision 3 classes/teacher
- Teacher savings
 - K-5: 7% fewer teachers
 - 6-8: 14% fewer teachers
 - 9-12: 29% fewer teachers
 - Overall: 15.4% fewer teachers
 - Overall budget savings: 8% or \$800 per student nationally
- Savings after curriculum costs
 - 5% or \$500 per student nationally
 - \$30 billion annually nationally

Good for Kids, Good for Taxpayers

- Lower costs
 - \$30 billion savings possible right now
- Better teachers
 - Hybrid model plus online charters require 16% fewer teachers
 - 3.8 million teachers in 2010 reduced by 600,000
 - Teacher quality will rise by making teaching more competitive
- Better “technology” of teaching, optimizing mix of online and teachers by student
- Greater productivity—achievement for the dollar—finally

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