

## **Broadband and Schools**

### The Key to Better Schools AND A Better Economy

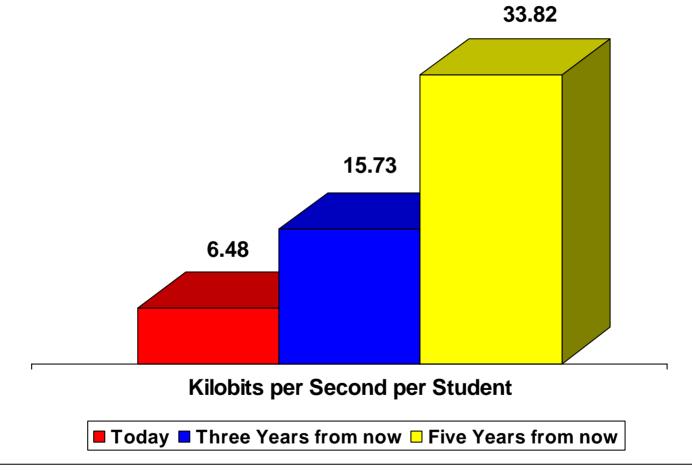
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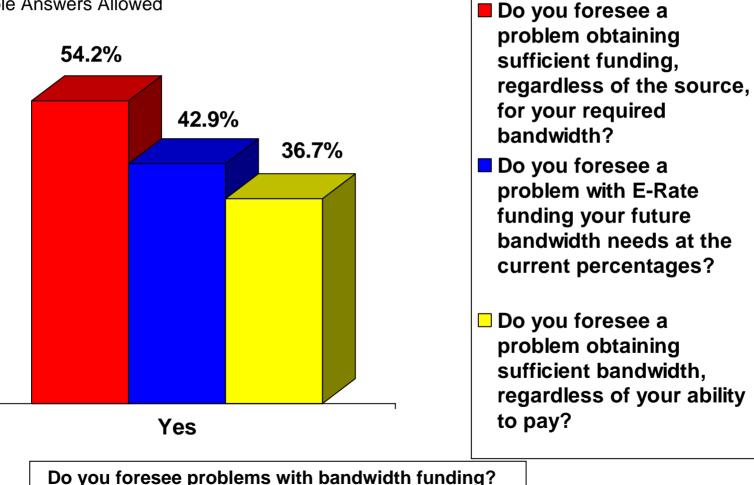
## 2008 Bandwidth per Student Projection



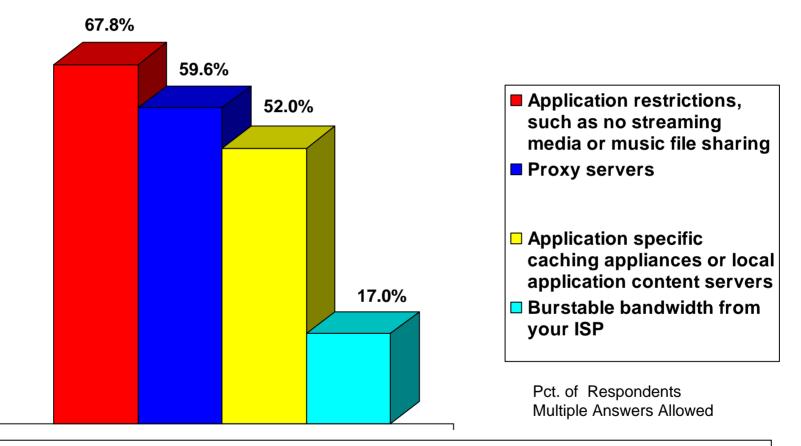
What is your total aggregate bandwidth, between all schools and district buildings and the Internet via your ISPs? How do you expect bandwidth per student to increase in the future?

#### Trouble on the Horizon

Pct. of Respondents Multiple Answers Allowed



## Bandwidth Leveraging is Impeding Education



Have you used any of the following to leverage the existing capacity of your bandwidth? Please check all that apply.

# Why Schools Need Broadband

- Personalization is the "Holy Grail"
- Personalization requires digital content
- To be effective, digital content must be available *everywhere*
- To accomplish this:
  - Every student needs a device
  - Always connected to the Internet
    - WiFi in schools and homes
    - Cellular data or WiMAX elsewhere

## Educational Broadband and the Economy

- Ubiquitous connectivity *enables* educational system transformation
- Technology transformed schools are *revenue positive* at the state level
  - Cost avoidance
  - Cost savings
  - Increased in tax revenues

#### **Broadband doesn't cost money – it saves money!**

#### See www.ProjectRED .org for more on this subject

# Recommendations

- Funding Options
  - E-Rate
    - Increase E-rate to \$6B/year, indexed for inflation
    - Add support for student device wireless broadband, with usage caps
  - Reallocate other federal funds
  - Provide tax incentives
- Spectrum
  - Allow new 2.5Ghz licenses in uncovered areas
- Equipment
  - Allow schools to use increased power for 3.65Ghz nomadic use
  - Encourage Smartphone changes that would address school usage concerns
- Other
  - Investigate Carrier excess capacity incentives
  - Fund research or SBIR for Education bandwidth conservation techniques

## For Further Research

- The Price We Pay Belfield and Levin
- <u>http://www.ed.gov/rschstat/eval/tech/evide</u>
  <u>nce-based-practices/finalreport.pdf</u>
- www.ProjectRED.org
- www.ads2008.org
- <u>www.CoSN.org</u>
- <u>www.SIIA.net</u>