



SHLB

SCHOOLS, HEALTH & LIBRARIES
BROADBAND COALITION

Getting to Gigabit:

The future of Broadband
for Anchor Institutions and Their
Communities



SHILB
SCHOOLS, HEALTH & LIBRARIES
BROADBAND COALITION

How will Mobile Broadband and BYOD Change Education?

Moderator:

Denise Atkinson-Shorey, e-Luminosity

Panel:

Keith Krueger, Consortium for School Networking

LeaAnn Eanes, Fairfax County Schools

Robert Collie, Education Networks of America



SHLB
SCHOOLS, HEALTH & LIBRARIES
BROADBAND COALITION

How will Mobile Broadband and BYOD Change Education?

Denise Atkinson-Shorey
e-Luminosity



SHLB

SCHOOLS, HEALTH & LIBRARIES
BROADBAND COALITION

How will Mobile Broadband and BYOD Change Education?

BYOD

Enterprise mobility is one of CIOs' top initiatives in 2012⁷

Employee BYOD Trends

81% of employed adults use at least one personally owned electronic device for business use¹

Apple shipped more iPADS in **2** years than macs over **20** years²

59% of employees use mobile devices to run line of business applications³

90% have disabled auto-lock for tablets, 75% for Smartphones¹



IT BYOD Challenges

2/3 say preventing unauthorized network access is a somewhat to extremely important task³

<10% of organizations are 'fully aware' of the devices accessing their network⁴

74% of companies allow BYOD usages in some fashion⁵

\$429,000 Typical large company loss due to mobile computing mishaps in 2011²

1/2 of companies have experienced a data breach due to insecure devices⁶

71% of companies are discussing developing custom mobile applications⁷

Enterasys Mobile IAM

Addressing the needs of IT and employees

IT simplicity and fast ROI —

1 Total Security 2 Guaranteed to Scale 3 Superior User Experience



How will Mobile Broadband and BYOD Change Education?

Businesses that embrace BYOD have some advantages over competitors. For starters, BYOD programs generally shift costs to the user. With the worker paying for most, or all of the costs for the hardware, voice or data services, and other associated expenses, companies save a lot of money -- as much as \$80 per month per user.



How will Mobile Broadband and BYOD Change Education?

Security and Mobile Devices—Survey from Motorola

- 2 out of 3 people realize that the responsibility falls on them, rather than the IT department, to keep mobile data private and secure.
- 73% of respondents said they are concerned about smartphone security; in fact, a quarter of them would rather share a toothbrush than their phone.
- Store sensitive data on phones: 34% store sensitive data such as their bank account information or work email passwords on their phones
- “Work around” company mobile policy: 55% admit they’ve sent work email or documents to their personal email accounts on their phones
- Chose convenience: 48% have used their devices to log into an unsecure wireless network
- Just aren’t that worried: 77% can name at least one thing they’re more familiar with than their company’s IT security policies (67% credit card terms, 57% health insurance policy, and even 33% are more familiar with their home appliance manuals)



SHLB

SCHOOLS, HEALTH & LIBRARIES
BROADBAND COALITION

How will Mobile Broadband and BYOD Change Education?

Keith Krueger

CEO, CoSN



How Will Mobile Broadband and BYOD Change Education?

SHLB Conference

Keith Krueger

CoSN CEO

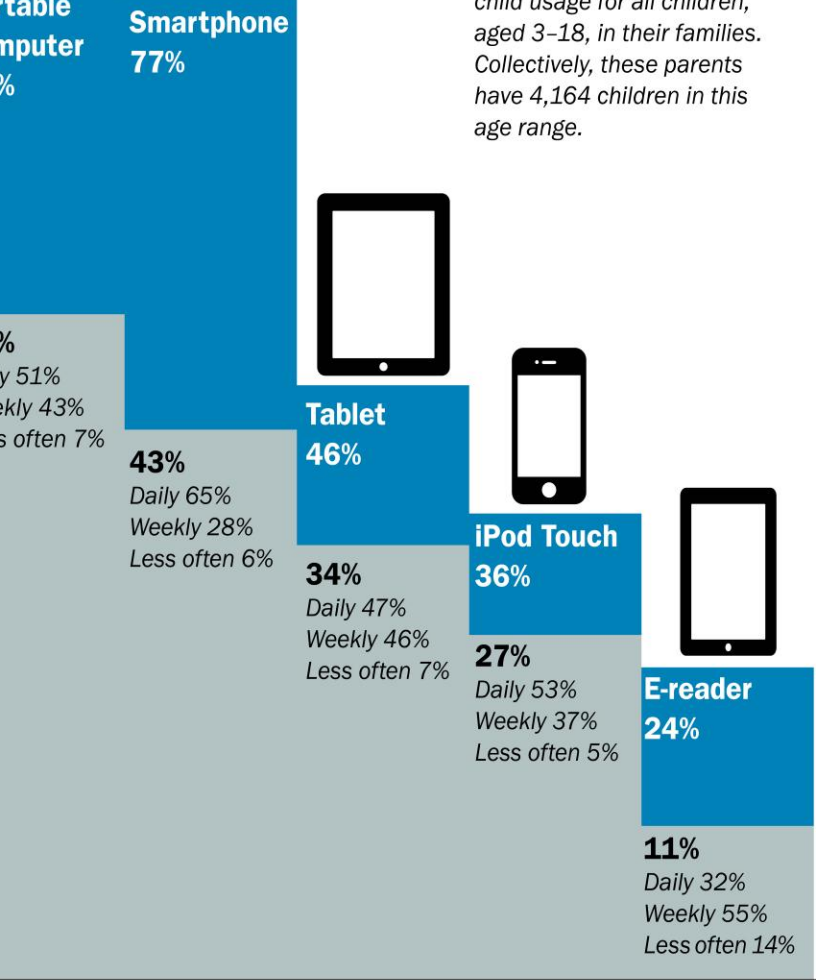
keith@cosn.org

2013 CoSN K-12 IT Leadership Survey

www.cosn.org/ITsurvey

Top 3 Priorities/Initiatives for 2012-2013

- 1) Bring Your Own Device (BYOD) strategies
- 2) IT Readiness for Common Core State Assessment
- 3) Increasing Broadband Access



Source: Grunwald Associates LLC

Living and Learning with Mobile Devices



What Parents Think About Mobile Devices for Early Childhood and K-12 Learning

Speak Up 2012 National Findings From Chalkboards to Tablets

Benefits of mobile devices for schoolwork

Extends learning beyond school day



Provides way for students to review materials anytime



Improves school to home communications



Increases student engagement

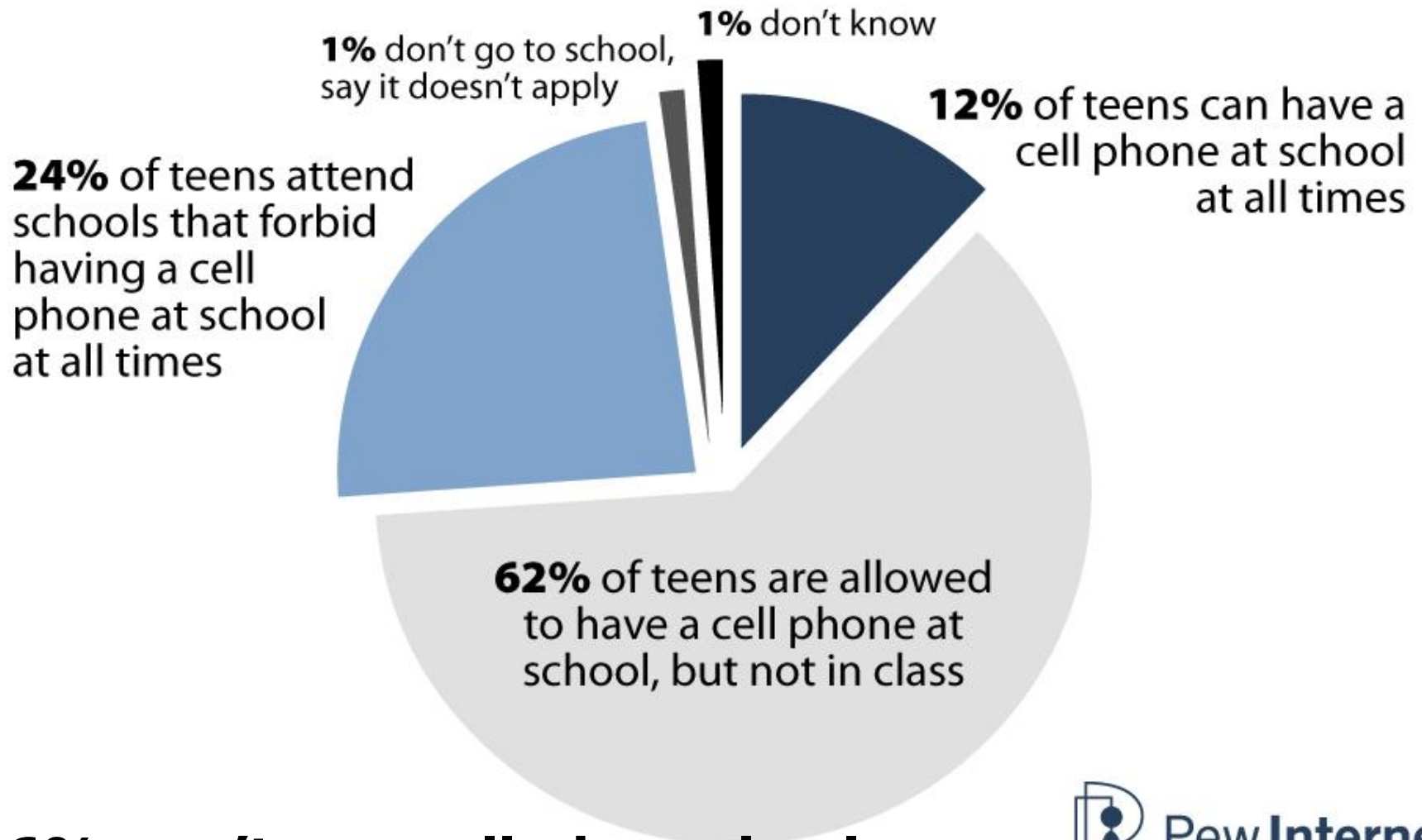


Personalizes learning



■ Principals ■ Teachers ■ Parents

Majority of teens can have cell phones at school but not in class



86% can't use cell phone in class



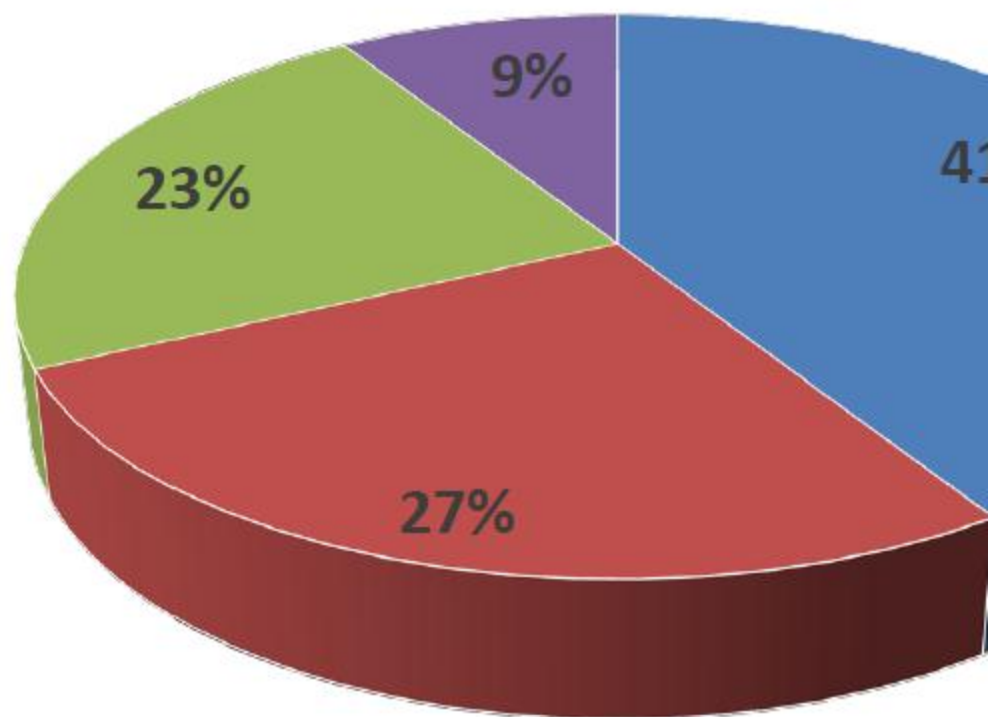
Speak Up 2012 National Findings From Chalkboards to Tablets

The BYOD/BYOT trend – what a difference a year makes!

Policy/Position	Admin 2011	Admin 2012
Do not allow	52%	37%
Discretion of building principal	16%	21%
Discretion of teacher	21%	32%
We provide devices	13%	18%
Evaluating BYOD/T	19%	28%
BYOD/T in place	17%	30%

What is the Status of BYOD/BYO

- Implemented
- Considering/ planning implementation
- In the process of implementing
- No BYOD



Concerns about BYOT

Adult (Parent/teacher/administrator)
views of mobile learning:

- » Distraction
- » Digital equity
- » Concerns of cheating
- » Lack of skills & curriculum to use
mobiles



CoSN's Administrators Guide to Mobile Learning

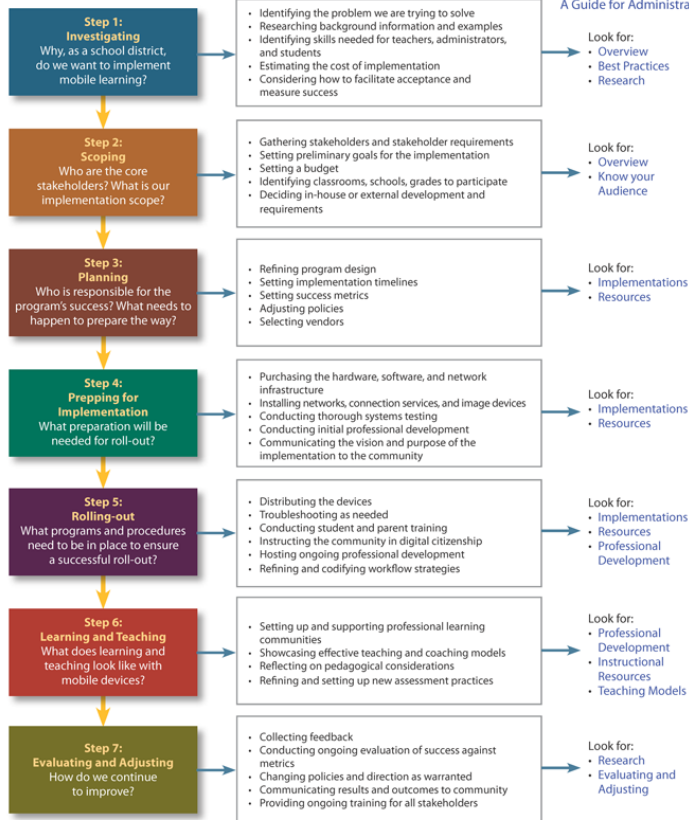
IN A NUTSHELL:

Setting up Mobile Learning In Your District!

Implementing a mobile learning program involves numerous considerations, multiple stakeholders, and difficult trade-offs. Regardless of the size of the program, there are seven implementation steps that are worth your consideration.

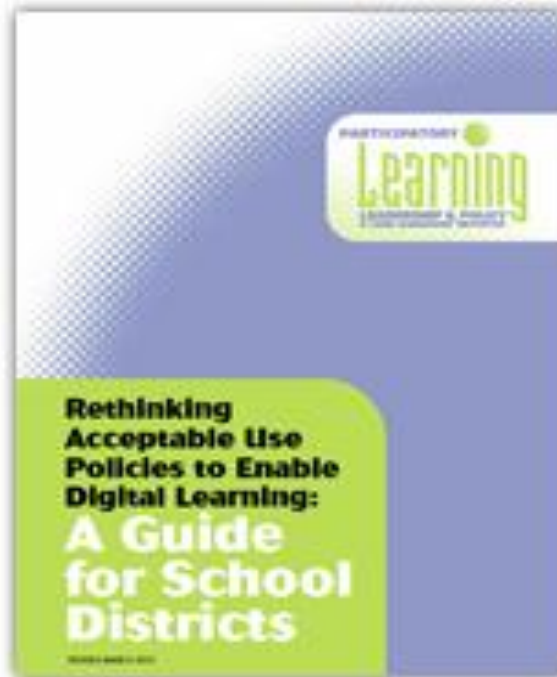


A Guide for Administrators



www.cosn.org/MobileAdminGuide

Resources



***[www.cosn.org/
MobileLead](http://www.cosn.org/MobileLead)***

www.cosn.org/AUPGuide



CoSN

National Contributing Partners:

American Association of School Administrators

American Association of School Librarians

Common Sense Media

Joan Ganz Cooney Center at Sesame Workshop

FrameWorks Institute

National Association of Elementary School Principals

National Association of Secondary School Principals

National Association of State Boards of Education

National Council of Teachers of English

National Education Association

National Writing Project

Partnership for 21st Century Skills

Student Press Law Center

Technology Leadership Network of the National School Boards Association

www.cosn.org/MakingProgress

MAKING PROGRESS:

**Rethinking State and
School District Policies
Concerning
Mobile Technologies
and Social Media**





SHLB
SCHOOLS, HEALTH & LIBRARIES
BROADBAND COALITION

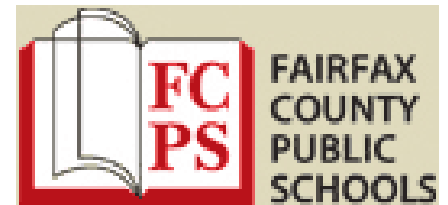
How will Mobile Broadband and BYOD Change Education?

LeaAnn Eanes,
Fairfax County Schools

Fairfax County Public Schools: Our Experience with BYOD and Making Learning Mobile

SHLB Conference
May 2, 2013

Lea Ann Eanes
IT Project Manager
Fairfax County Public Schools



FCPS Related Projects/Timeline

Digital Learning Expansion: Online Textbooks
(Fall 2010)

Access4All Team (June 2011)

- BYOD (Fall 2011)
- Student Computer Check-Out program (Fall 2011)
- Connect To Compete (ongoing)
- Kajeet (February 2012)
 - » Making Learning Mobile
 - » SmartSpot (mifi) (January 2013)



BYOD: Planning for Implementation

- Late summer of 2011, FCPS developed a framework for embracing and managing the use of personally owned computing devices within FCPS.
 - Students may use their device for ready access to online instructional materials, such as online textbooks at all grade levels
 - Supplements school resources and equipment
 - Makes possible a 21st century classroom
 - Enables student ownership of their own learning
 - Student real time access to information
 - Smooth transition between home and school

BYOD: Professional Development

- Involved Stakeholders (teachers, administrators, technology support staff, parents) in developing an understanding of benefits of BYOD implementation
- Developed Resources for schools to get started (sample communications, classroom strategies and ideas)
- In process of developing on-line course for instructional staff

BYOD: Next Steps

- Streamline registration and reporting framework
- Continue to solicit input from stakeholders to address all needs
- Develop professional development tools for instructional staff
- Increase communication to parents about BYOD benefits
- Investigate low cost options to increase student access to devices for personal use at home and school

BYOD is Trending



About ASCD

Books & Publications

Educational Leaders



Home Current Issue Archives

October 2012 | Volume 70 | Number 2
Students Who Challenge Us Pages 84-85

On Board with BYOD

Doug Johnson

Should students bring their own personal technologies to school and use



BYOD Resources

- New and improved resources developed in collaboration between IT and IS to support your school and community embrace and manage BYOD within FCPS

http://fcpsnet.fcps.edu/it/offices/itss/customer_srvc/srvc_mgmt/information/personal_devices.shtml

CONQUER THE FEAR

Allow Questions



Allow for Lack of Knowledge

Involve Stakeholders
in developing plans
and guidelines

EMBRACE VARIETY

FOCUS ON THE CONTENT NOT THE DEVICE

Acer Aspire One
ASUS Laptop
AT&T Infuse 4G
Compaq Presario CQ56
Droid 2
Droid 3
Droid 3
Gateway T70 Laptop
HP Laptop
HP Touchpad
HTC Evo Design
htc evo shift
HTC Inspire Cell
iPad
iPad 2
iPad Touch
iPad3
iPhone
iPhone 3G
iPhone 3GS
iphone 3s
iphone 4

ipod touch
ipod touch 4G
Kindle
Kindle Fire
Kindle Touch
KindleFire/Overwrote OS
LG Enlightment
LG Phone
MacBook
MacBook Pro
Motorola Boom
Nook
Nook Color
Nook Ereader
Nook Simple Touch
Nook Tablet
Pandigital Tablet
Pantech CellPhone
Samsung Exhibit 2
Samsung Galaxy
Samsung Galaxy Phone
Samsung Netbook

AC Thunderbolt Phone
Acer A500
Asus Laptop
HP Pavillion dv7-1448dx
HTC Inspire
IPad2
Ipad3 replacement
Iphone
Iphone 4
iPhone3
iPhone4
iTouch
Kindle
LG Thrill
MacBook Pro
Nokia 5230
Nook
Phone - Droid2

Samsung SGH I997
Samsung marbl phone
Samsung vibrant
Sony Vaio laptop
Sony xperia Play
Toshiba Laptop
Toshiba Netbook
Toshiba Satellite Laptop
Wonder Media Tablet



Support for BYOD Rollout

- **For Staff:**

http://fcpsnet.fcps.edu/it/offices/itss/customer_srvc/srvc_mgmt/information/personal_devices.shtml

- **For Parents:**

<http://www.fcps.edu>

Select either Parents or Students

Get Help with Homework

[Bring Your Own Device](#) (BYOD)



Making Learning Mobile: A One-to-One Android Tablet Deployment

Meridith Bruozos, Chicago Public Schools
LeaAnn Eanes, Fairfax County Public Schools
Julie Evans, Project Tomorrow

March 12, 2013

Project Partners

Common Sense Media

EduTone

Emantras

Kajeet

Qualcomm Wireless Reach Initiative

Chicago Public Schools

Fairfax County Public Schools

Project Tomorrow

Project Partners

Fairfax County Public Schools – Stone Middle School

- 7th – 8th Grade School
- 816 students
- 21% socio-economically disadvantaged
- 53% Caucasian, 17% Asian, 16% Latino
- 15% of students are in special education

- 120 students in the MLM pilot



Project Design

- Implementation of HTC EVO tablets
- Integration of tablets into classroom instruction
- Ability for students to use the devices outside of school
- Focus on student outcomes and teacher practice

Project Research Plan

- What is the impact of the use of the tablets on student outcomes, teacher productivity?
- What are the barriers to success?
- What are the critical success factors?
- What did we learn from this experience?

Project Research Plan

Intermediate results: students' use of tablets

	Stone	Falconer
Access online textbooks	77%	38%
Use the calculator	74%	47%
Internet research	70%	59%
Take notes	67%	49%
Check grades	66%	77%
Play games	54%	55%

Project Research Plan

Data collection:

- Pre and post surveys
- Student focus groups
- Teacher interviews
- Classroom observations
- Speak Up surveys

Result:

- White paper on the results



SHLB
SCHOOLS, HEALTH & LIBRARIES
BROADBAND COALITION

How will Mobile Broadband and BYOD Change Education?

Robert Collie

Education Networks of America



SHLB
SCHOOLS, HEALTH & LIBRARIES
BROADBAND COALITION

How will Mobile Broadband and BYOD Change Education?

Questions ??



SHLB

SCHOOLS, HEALTH & LIBRARIES
BROADBAND COALITION

How will Mobile Broadband and BYOD Change Education?

Contact

Denise Atkinson-Shorey

denise.shorey@e-luminosity.net

Keith Krueger keith@cosn.org

LeaAnn Eanes lmeanes@fcps.edu

Robert Collie bcollie@ena.com



SHLB
SCHOOLS, HEALTH & LIBRARIES
BROADBAND COALITION

How will Mobile Broadband and BYOD Change Education?