NSDL Annual Meeting
Washington, DC
November 18, 2009

Critical Trends in K-12 Education
Selected Findings from Speak Up 2008

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Project Tomorrow

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Today’s Topics

• Key issues for NSDL Community
• What is Speak Up?
• Trends to Watch (from Speak Up data)
• Seeding Innovation: A Case Study
• Implications for NSDL
Key Issues for NSDL

• Innovation
• Dissemination/Impact
• Approach to Sustainability

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What is Speak Up?

- National Research Project
- Largest authentic, unfiltered database of stakeholder views
  - Students (k-12)
  - Parents
  - Teachers
  - Administrators
  - Pre-Service Teachers (NEW)

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Speak Up Reach

- Over 1.5 million participants (since 2003)
  - 1.3 million K-12 students
  - 103,000 teachers
  - 54,000 parents
  - 6,300 school leaders
  - 18,000 schools from all 50 states, DC, American military base schools, Canada, Mexico, Australia

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Speak Up 2008

K-12 Students 281,500
Teachers 29,644
Parents 21,309
(in English & Spanish)
Administrators 3,114
Schools 4,379
Districts 868
States All 50

Top 10: TX, CA, AZ, AL, IL, MD, FL, NC, NE, WI

About Speak Up Schools
- 95% public, 3% private, 2% virtual
- 35% urban, 32% suburban, 33% rural
- 45% Title 1 eligible
- 34% majority-minority student population

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How to use Speak Up

- Gain insights about your audience
- Inform the design of your portal
- Develop outreach strategies
- Understand opportunities/challenges in K-12
Informing Innovation

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Getting Started

• Who am I?

• Warm Up Exercise

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Who am I? Profile characteristics:

Access to mobile devices:  
- MP3 player (44%)  
- Game player (53%)  
- Laptop (44%)

Participates in immersive virtual reality environments (39%)

Uses Internet for education research (51%) and online assessments (35%)

Wishes for their ultimate school  
- Online classes (27%)  
- High tech science tools (39%)  
- Online tools for organization (35%)

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Audience Response: Who am I?

1. Kindergarten Boy
2. 3rd Grade Girl
3. 7th Grade Boy
4. 10th Grade Girl
5. Teacher

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Who am I?
3rd Grade Girl with Average Tech Skills

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Meet today’s 3rd grade girls:

Access to mobile devices:
- MP3 player (44%)
- Game player (53%)
- Laptop (44%)

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Wishes for their ultimate school
- Online classes (27%)
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How are students using technology for schoolwork?

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TREND #1 –
Digital Advance Team

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Digital Advance Team

- Adopting/Adapting technologies for learning
- Tech trend setters
- Use predicts widespread acceptance
- Out of school use drives school use

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Advance Team Trends

- Mobile Learner
- Use Web 2.0
- “I’ll take that class to go!”
- Personalizing learning - ultimate online textbook

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Mobile Learner

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Using mobile devices for learning

- **Communications**
  - Email teachers, classmates
  - Access personal websites

- **Collaborations**
  - Projects and calendars

- **Creativity**
  - Create/share documents, videos

- **Productivity**
  - Research, downloads, ed games
  - Get alerts and reminders

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Using Web 2.0 for learning

• Communications
• Creation
• Collaboration
• Contribution
Web 2.0: Collaborate & Contribute

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“I’ll take it to go!”

<table>
<thead>
<tr>
<th></th>
<th>Taken online class</th>
<th>Interested</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Students</td>
<td>16%</td>
<td>40%</td>
</tr>
<tr>
<td>Middle School Students</td>
<td>14%</td>
<td>45%</td>
</tr>
<tr>
<td>G3-5</td>
<td></td>
<td>15%</td>
</tr>
</tbody>
</table>

Interest in online learning increased since 2007
- +40% of high school students
- +35% of middle school students

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Online offers choices

- Earn college credit
- Work at my own pace
- Take class not offered at my school
- Complete HS requirements
- Get extra help in a subject
- Fit my schedule
- Easier for me to learn in an online class

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Online offers personalization

- Puts me in control of my learning (47%)
- Easier to review class materials (38%)
- Easier for me to succeed (32%)
- Comfortable asking questions (29%)
- More motivated to learn (27%)

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The ultimate textbook
MIDDLE/HIGH SCHOOL

- Electronic notes & highlighting (63%)
- Self assessments (62%)
- Links to useful websites (60%)
- Games & simulations (55%)
- Access to online tutors (53%)
- Links to real time data (52%)
- Virtual Labs (45%)
- Podcasts from subject experts (34%)

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Textbooks going mobile

• Students want to download information to cellphone
  - 53% high school students
  - 53% middle school students
  - 25% 3rd - 5th grade students

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Imagine you are designing the ultimate school for 21st century learners. Which of these tools or strategies do you think holds the greatest potential for increasing student achievement and success?
TREND #2 -
Digital Resources in the Classroom

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What digital resources are teachers using?

- Teaching Aides: 68%
- Software: Skill Development: 49%
- Online curriculum: 30%
- Software: Thinking Skills: 27%
- Game-based environments: 26%
- Real-time data (e.g. NASA, GOOGLE Earth): 26%
- Online textbooks: 24%
- Podcasts/Videos: 19%
- Animations: 14%
- Simulations: 11%
- Virtual Labs: 7%

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Digital Resources: Teachers & Students

(c) 2009, Speak Up National Findings
### Finding digital resources

#### Administrators: What is your district’s current philosophy about incorporating digital resources into your curriculum?

<table>
<thead>
<tr>
<th>Method</th>
<th>Administrators</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find my own/Flexibility</td>
<td>50%</td>
<td>40%</td>
</tr>
<tr>
<td>Teacher recommended websites</td>
<td>40%</td>
<td>32%</td>
</tr>
<tr>
<td>Credible organizations</td>
<td>33%</td>
<td>32%</td>
</tr>
<tr>
<td>Textbook publishers</td>
<td>28%</td>
<td>25%</td>
</tr>
<tr>
<td>State Department of Education</td>
<td>17%</td>
<td>15%</td>
</tr>
<tr>
<td>Creative Commons/OER</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>School/district portal</td>
<td>33%</td>
<td>33%</td>
</tr>
<tr>
<td>District pacing and/or curriculum guides</td>
<td>32%</td>
<td>32%</td>
</tr>
<tr>
<td>School/district recommended</td>
<td>29%</td>
<td>29%</td>
</tr>
<tr>
<td>Create my own</td>
<td>29%</td>
<td>29%</td>
</tr>
<tr>
<td>Don’t use digital resources</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>No policy</td>
<td>15%</td>
<td>15%</td>
</tr>
</tbody>
</table>
Barriers to using digital resources

- Funding: 25%
- Insufficient Internet access: 13%
- Computer access: 9%
- Unsure about copyright issues: 6%
- Curriculum alignment: 7%
- District doesn't provide a list: 8%
- Can only use resources in LMS: 12%
- Don't know how to use resources: 14%
- Other priorities: 0%

Administrator's preferences:
- Funding: 25%
- Computer access: 9%
- Insufficient Internet access: 13%
- Unsure about copyright issues: 6%
- Curriculum alignment: 8%
- District doesn't provide a list: 12%
- Can only use resources in LMS: 3%
- Don't know how to use resources: 14%
- Other priorities: 0%

Teacher's preferences:
- Funding: 25%
- Computer access: 9%
- Insufficient Internet access: 13%
- Unsure about copyright issues: 6%
- Curriculum alignment: 8%
- District doesn't provide a list: 12%
- Can only use resources in LMS: 3%
- Don't know how to use resources: 14%
- Other priorities: 0%
Online classes - today

• 49% of administrators report teachers are their primary audience for online classes
  - 24% students (in school)

• 33% of teachers have taken professional development online
  - Students: middle school (14%) and high school (16%)

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Technology & professional learning communities

- Provide online courses
- Provide graduate level courses
- Tools to collaborate
- Centralized repository of teaching resources
- Easy access to student data
- Use blogs or wikis
- Teaching topics via podcasts or webcasts
- Connect with experts via videoconference

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Seeding Innovation

- Districts tell us they made a conscious decision to use professional development.
  - Streamline PD process
  - Introduce teachers to tools
  - Ultimately provide online classes
Implications for Pathways...

- **Innovation**
  - Digital Advance Team serve as guides

- **Dissemination**
  - Teachers want to gain experience with technology before using in classroom
Implications for Pathways...

- Sustainability
  - Opportunities for professional development services
  - Create relevance: animations, simulations,
Learn more about Speak Up

Speak Up for K-12
http://www.tomorrow.org/speakup/index.html

Speak Up for Higher Ed
http://www.tomorrow.org/SU4HigherEd/index.html

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