Living and Learning with Mobile Devices

May 16, 2013
Presenters

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AT&T Support of Education Today

Internal

A Motivator for Employees:

Agree that “Education” is highly relevant to AT&T’s current business priorities

A Leadership Vision:

"We know that education is key to winning the future and that, in order to compete, we need to challenge ourselves to improve educational outcomes.”

Aspire

Aspire Mentoring Academy:

231,000 hours dedicated by over 11,000 AT&T employees

Aspire:

Over 1,000,000 students already impacted across all 50 states

Philanthropic Commitment:

$350M commitment to efforts lowering the high school drop out rate

AT&T Education Solutions

Sparking the Education Ecosystem:

Increasing student connectivity with AT&T mobile solutions

Bandwidth for Learning:

Scalable and secure Ethernet and VPN services for classroom broadband

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AT&T’s Education Involvement:

Good Business

AT&T Business Services

Human Resources

AT&T Foundation Philanthropy

Good Citizen

Mobility Services

AT&T Mobile Enterprise Applications Platform

Ecosystem Collaboration

AT&T Stadium Vision

Rave Solutions

U-Verse Inspired Documentary Series

AT&T Mobile Device Management for Education

Aspire Local High School Impact Initiative

*Please note that this hierarchy does not reflect all of HR’s education initiatives
Background & Summary

• Importance of the Parent Voice

• Care + Accuracy

• Multitude of devices / Uses
  o Girls
  o Younger Students

• Potential vs Current Reality
  o Smartphones taken to schools
  o BYOD mobile/portable
  o Districts require

• Parent View: Balanced, Yet Optimistic
  o Most optimism where schools require
About the Study

Online survey with parents of kids 3-18

Nationally representative web-based survey:
- Robust, nationally representative survey of parents of children ages 3 – 18 in November 2012
- Screening criteria excluded those employed in market research and those who homeschool

Screening resulted in a core sample of 979 parents who completed the full survey:
- First, a sample of 925 parents balanced to match the composition of U.S population by age, ethnicity, income, and region was obtained
  - Quotas were set to match the census data provided by the National Center for Education Statistics
- Next, in order to ensure an adequate sample of parents of preschool-age children who use mobile devices, 54 additional interviews were conducted with this group (augment sample). Note this sample is used for sub-group analysis of mobile device users by age only

Basic technology ownership and usage data was also collected among all households screened:

- 2,392 Households screened
- 4,164 Children represented
Definitions

Mobile devices
Wireless handheld devices that use Wi-Fi, 3G or 4G to connect to the Internet, many of which use an operating system such as iOS, Windows or Android, and can run various types of apps. Examples include smartphones, tablets, e-readers, and the iPod Touch.

Portable devices
Laptops, notebooks, netbooks, ultrabooks.
Family Technology Ownership and Use

Pre-K through 12th Grade

Note: The 2,392 parents who answered this question were asked to report about child usage for all children, aged 3–18, in their families. Collectively, these parents have 4,164 children in this age range.
Mobile devices are making their way to school. By high school, half of all students (51 percent) carry a smartphone to school with them every day.

Grades 3-5: 8%
Middle school: 28%
High school: 51%

25% All K-12
Mobiles + Apps Build Life Skills

Percentage of Parents Who Completely or Somewhat Agree That Mobiles and Apps …

- **85%** Can make learning fun  
  - Parents of K-2 children (90%)
- **81%** Teach basic technology skills
- **77%** Promote curiosity  
  - Parents of pre-K children (84%)
- **74%** Help their child know local and global current events
- **71%** Help expose their child to things s/he would never have known or experienced otherwise
- **70%** Create new ways to interact with others
- **69%** Teach responsibility
- **64%** Foster creativity
- **63%** Allow their child to express himself or herself
- **63%** Teach problem solving  
  - Parents of pre-K children (73%)
- **60%** Allow their child to relax and unwind
- **58%** Help their child connect with others around social issues or causes  
  - Parents of high school students (66%)
- **57%** Help their child create rather than just consume content
- **52%** Help their child understand rules

Note: Grade-level findings indicate statistically significant differences in parent responses compared to those of parents of children in at least one other grade span.
Parents: Mobiles & Apps Help Teach Academic Content, Skills….

*Parents of Younger Students Have More Faith in Academic Benefit*

- **68%** Reading
  - Parents of K-2 children (79%)

- **67%** Math
  - Parents of K-2 children (75%)
  - Parents of 3-5 students (72%)

- **63%** Science
  - Parents of K-2 children (72%)

- **62%** Foreign languages
  - Parents of K-2 children (71%)

- **58%** Social studies

- **40%** Writing
  - Parents of K-2 children
…..And School-Related Skills

*Parents of Students of All Ages*

- **71%** Helping document their child’s schoolwork and progress
- **63%** Encouraging their child to read more
- **63%** Building developmental skills
  - Parents of K–2 children (74%)
- **59%** Learning basic academic skills
  - Parents of K–2 children (66%)
- **55%** Helping children excel or perform better in school
Parents of younger children are more likely to report that mobile apps and content promote curiosity, foster creativity and teach problem solving. These parents also are more likely to report the benefits of mobiles for teaching academic content, including reading, math, science and foreign languages, as shown in Table 1.

### Educational Value of Mobile Apps and Content, by Grade of Child

<table>
<thead>
<tr>
<th>Learning Benefit</th>
<th>K-2</th>
<th>3-5</th>
<th>6-8</th>
<th>9-12</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote curiosity</td>
<td>84%</td>
<td>74%</td>
<td>70%</td>
<td>77%</td>
<td>76%</td>
</tr>
<tr>
<td>Foster creativity</td>
<td>71%</td>
<td>62%</td>
<td>58%</td>
<td>64%</td>
<td>64%</td>
</tr>
<tr>
<td>Teach problem solving</td>
<td>73%</td>
<td>62%</td>
<td>56%</td>
<td>59%</td>
<td>63%</td>
</tr>
<tr>
<td>Teach reading</td>
<td>79%</td>
<td>69%</td>
<td>63%</td>
<td>62%</td>
<td>68%</td>
</tr>
<tr>
<td>Teach math</td>
<td>75%</td>
<td>72%</td>
<td>63%</td>
<td>59%</td>
<td>67%</td>
</tr>
<tr>
<td>Teach science</td>
<td>72%</td>
<td>60%</td>
<td>59%</td>
<td>60%</td>
<td>63%</td>
</tr>
<tr>
<td>Teach foreign languages</td>
<td>71%</td>
<td>60%</td>
<td>59%</td>
<td>59%</td>
<td>62%</td>
</tr>
</tbody>
</table>

*Note: Boldfaced percentages indicate statistically significant differences in parent responses compared to those of parents of children in at least one other grade span.*
## Girls’ Parents Are More Optimistic

<table>
<thead>
<tr>
<th>Benefits of Mobile Devices and Apps, by Gender of Child</th>
<th>Parents Who Completely or Somewhat Agree, by Gender of Child</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Learning Benefit</strong></td>
<td><strong>Parents of Girls</strong></td>
</tr>
<tr>
<td>Can make learning fun</td>
<td>89%</td>
</tr>
<tr>
<td>Help prepare my child to use other technology</td>
<td>88%</td>
</tr>
<tr>
<td>Teach basic tech skills</td>
<td>84%</td>
</tr>
<tr>
<td>Promote curiosity</td>
<td>81%</td>
</tr>
<tr>
<td>Create new ways to interact with others</td>
<td>76%</td>
</tr>
<tr>
<td>Teach responsibility</td>
<td>75%</td>
</tr>
<tr>
<td>Teach reading</td>
<td>73%</td>
</tr>
<tr>
<td>Teach math skills</td>
<td>71%</td>
</tr>
<tr>
<td>Foster creativity</td>
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<td>Teach science</td>
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</tr>
<tr>
<td>Teach foreign languages</td>
<td>66%</td>
</tr>
<tr>
<td>Encourage my child to read more</td>
<td>66%</td>
</tr>
<tr>
<td>Build developmental skills</td>
<td>67%</td>
</tr>
<tr>
<td>Allow my child to express himself/herself</td>
<td>66%</td>
</tr>
<tr>
<td>Are a way for me (as a parent) to connect with my child</td>
<td>62%</td>
</tr>
<tr>
<td>Help my child understand rules</td>
<td>56%</td>
</tr>
</tbody>
</table>

*Note: Boldfaced percentages indicate statistically significant differences in responses of parents of girls compared to those of parents of boys.*
School Policies & BYOD

Percentage of K–12 Parents Who Say Their Child’s School Has a Mobile Device Policy

- Yes: 78%
- Don’t Know: 16%
- No: 6%

Percentage of K–12 Parents Who Say Their Child’s School Allows Students to Use Family-Owned Mobiles in the Classroom

- Yes: 16%
- Don’t Know: 10%
- No: 72%
## School-Required Use of Mobile or Portable Devices is Associated With Parent Perceptions of Learning Benefits for Children

<table>
<thead>
<tr>
<th>Learning Benefit</th>
<th>Child’s School Requires Mobile or Portable Use</th>
<th>Child’s School Does Not Require Mobile or Portable Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can make learning fun</td>
<td>93%</td>
<td>83%</td>
</tr>
<tr>
<td>Promote curiosity</td>
<td>90%</td>
<td>74%</td>
</tr>
<tr>
<td>Help my child know local and global current events</td>
<td>88%</td>
<td>71%</td>
</tr>
<tr>
<td>Teach reading</td>
<td>85%</td>
<td>65%</td>
</tr>
<tr>
<td>Teach maths</td>
<td>84%</td>
<td>64%</td>
</tr>
<tr>
<td>Teach responsibility</td>
<td>83%</td>
<td>67%</td>
</tr>
<tr>
<td>Teach science</td>
<td>82%</td>
<td>59%</td>
</tr>
<tr>
<td>Encourage my child to read more</td>
<td>82%</td>
<td>59%</td>
</tr>
<tr>
<td>Teach foreign languages</td>
<td>80%</td>
<td>59%</td>
</tr>
<tr>
<td>Help my child to excel or perform better in school</td>
<td>77%</td>
<td>50%</td>
</tr>
<tr>
<td>Teach social studies</td>
<td>76%</td>
<td>54%</td>
</tr>
<tr>
<td>Teach problem solving</td>
<td>76%</td>
<td>60%</td>
</tr>
</tbody>
</table>

*Note: Boldfaced percentages indicate statistically significant differences in responses of parents whose child’s school requires the use of mobile devices compared to parents whose child’s school does not.*
Parents Want Schools to Use Mobiles

- 71% of parents want mobile tech used for learning.
- 52% believe schools should make more use of mobile devices in education.
- 32% think schools should require mobile devices in the classroom.

...Though They Have Some Concerns...

- 81% express concerns about the security/theft of devices taken to school.
- 62% are concerned mobile devices can distract from learning.

On Balance, Many Are Moving Forward

- 45% of parents are not waiting for schools to adopt mobile devices.
- 45% of parents have already purchased mobile devices for learning.
Guidance from School Wanted:

*Parents Who Say....*

- **70%**
  - Teachers should recommend apps for students to use

- **64%**
  - Schools should help students use devices safely

- **43%**
  - Need help finding good educational apps for their children
Conclusion

- Communication w/ Parents
- Modeling
- Collaboration
- Industry Partnering
- Recommendations.....
Recommendations for Educators

• Model appropriate use of mobile devices.

• Partner with parents to make the case for mobile learning, develop mobile device policies and showcase best practices

• Enlist the support of parents most positive about mobile learning, including parents of younger children, parents of “super users” and tech-savvy parents.

• Leverage the devices that students already have access to or are bringing to school (the BYOD approach). Consider a need-based approach
Recommendations for Educators (continued)

• Offer advice to parents and students on use of mobile devices and apps for learning — and differentiate this guidance for different grade levels.

• Do a better job communicating mobile device policies with parents—the “back to school” packet of information might not be enough.

• Share and learn from schools already offering mobile learning opportunities. Connect with other educators via online communities of practice to exchange insights on best practices.

• Partner with industry to contribute to the development of mobile devices, apps and content.
Recommendations for Industry & Mobile Learning Advocates

• Work with educators and education organizations to develop more educational content, apps and services for mobile devices.

• Help parents and educators find educational offerings as easily as they do entertainment content. Provide better sources of information about what’s available, in formats such as well-curated online databases or clearinghouses.

• Partner with schools to demonstrate the value—and measure the success and reach—of mobile devices as tools for learning.

• Develop practical information and resources on mobile, such as toolkits and templates, to help schools and parents work together.
Recommendations for Industry & Mobile Learning Advocates (cont.)

• Continue research with parents and students to address their needs and wants. Ramp up education research to learn more about how mobile devices and apps are best used for learning, and to identify what works.

• Partner with education organizations to organize one or more national, distributed online events to showcase the potential of mobile learning at school and at home.

• Partner with parent organizations to encourage parents to leverage mobile technology for learning outside of school.

• Establish guidelines to communicate educational components in mobile apps and content so that parents and educators can easily recognize and evaluate mobile content.
West Allis - West Milwaukee School District
Personalization Initiative
Walker Elementary School
Stacey Lange - Walker N^2GLC Teacher
Keshia Wolf - Walker Technology Integrator
West Allis-West Milwaukee School District

- Urban School District, in West Allis, WI
- 18 Schools in WAWM District
- Nearly 9,500 Students
- 58% Economically Disadvantaged
Personalized Learning Initiative

- NxGL Pillars: College and Career Readiness, Student Centered Learning Environments, Competency Based Progression, Student Voice in Learning, 21st Century Skill Set, Family and Community Partnership

- iPads are a primary tool utilized for personalized learning, through student goal setting and the implementation of personalized learning paths, student content creation apps, and interactive resources.

- MacBooks serve as a tool for professional educator content creation and for the downloading of paid apps.
Walker Elementary School

* 4K-5 Elementary School

* Approximately 400 Students

* Received National Blue Ribbon Award

* Year 1- 2 NxGL Communities with 180 Students

* Year 2- School Wide NxGL Community
Personalized Learning

* Teacher Role

* Student Role

* Technology Integrator Role
Parental Support

Steps to Success...

* Updated School Board Technology Policies
* District Informational Packets Sent Out to the Community
* Held Informative Technology Seminars with Parents and the Community
* NxGL Implementation

Results...

* Enrollment Increase
* Technology was made a priority by families outside of the school day.
Evidence of Success

MAP Growth Target Attainment

<table>
<thead>
<tr>
<th></th>
<th>Fall 2011-Spring 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Walker NxGL</td>
</tr>
<tr>
<td><strong>Reading</strong></td>
<td>88</td>
</tr>
<tr>
<td><strong>Math</strong></td>
<td>87</td>
</tr>
</tbody>
</table>

% of students meeting growth targets
Evidence of Success

WKCE Proficiency 2012-2013

% of students Advanced or Proficient

- District Elementary: 32.9
- Year 1 N x GL Elementary School: 43.8
- Year 2 Teams N x GL School: 66.6
- Year 2 Teams N x GL School: 85.7

Legend:
- Blue: Reading
- Red: Math
Q & A
Thank You!