

# INFORMATION TECHNOLOGY INSIGHTS FOCUS GROUPS

## **Background & Objectives:**

The Minnesota Governor's Council on Developmental Disabilities is interested in exploring the accessibility, usability, current and future needs, requirements, and expectations of youth with and without disabilities regarding Information Technology.

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## Methodology:

- Six focus groups were convened with groups ranging from 10 to 30 students of classmates and friends; 88 students in total. Groups represented elementary, middle school and high school.
- There were 70 students with a wide range of disabilities and 18 students without disabilities.
- Students were given worksheets as homework three to four days before their scheduled focus group session.
- All sessions occurred during May 2008.

## Methodology continued:

- There were three parts to the worksheets and focus group discussions.  
**PART 1:** How You Currently Use Information Technology.  
**PART 2:** Use of State of Minnesota Websites.  
**PART 3:** Future Predictions (Topics based upon a speech given by Bill Gates in 2007)
- Teachers and facilitators explained the worksheets and the expected homework.
- In the group sessions the worksheets were projected onto a screen and students were lead through and discussed the worksheet items line by line.
- Their homework, comments, and quotes were collected.

## **Methodology continued:**

- The worksheets and group discussion comments were consolidated by major group: Eagan, Transition to Adult Program (TAP), Woodbury, and John Marshall high school (JM).
- The information was entered into an MS Excel file for further analysis.

## Key Findings:

- All students have access to a computer somewhere either school or home.
- Surprisingly there was no difference in use of technology between students with and without disabilities.
- Students are into the use of Information Technology in a big way and they are strongly interested in ongoing improvements in the function and availability of the devices.
- One might say the devices are part of their apparel (glued to their hip); intimate tools used in their day-to-day lives.

## PART 1: How You Currently Use Information Technology.

- What devices do you use?

Computer            91%

Cell Phone           71%

Game Consoles 63%

MP3 player           59%

- Discussion:

- *“Communication is the biggest use of the cell phone and the computer.”*
- *“Homework includes looking up facts and discussing with friends on what they found.”*
- *“The computer combined with a cell phone could be used for a lot more things around the home, like turning things off and on.”*

## **PART 2: Use of State of Minnesota Web Sites.**

- Which sites have you used or looked at?
  - Your school (actively using) 76%
  - State of Minnesota (looked at) 39%
- **Majority Comments About MN Web Sites:**
- **Strengths:**
  - *“Good built in search engine. “*
  - *“Good information and facts.”*
- **Opportunities for improvement**
  - *“Didn’t know it existed – should advertise.”*
  - *“Hard to find – didn’t understand ‘Northstar.’”*
  - *“Should have compatibility of look across all agencies.”*

## Part 3: Future Predictions (Topics based upon a speech given by Bill Gates in 2007)

Using a rating scale from 1 to 10 where 1 is “least important” and 10 is “most important”, students were asked to rate how important they felt the following future predictions were to them. Rate on a scale of 1 to 10 (10 most important or strongly agree is 10)

### Top 4 topics rated as important or agreed to be important by students:

- Geographic mapping improves 7.8
- Training means all universities begin sharing their curricula online and free. 7.6
- Libraries are archived on line 7.1
- Cell phones hold medical information chips; handle banking; e-mail etc. 7.0
  - Much discussion that the cell phone should become merged with computer functions.
  - Many use text messaging today.

### Major disagree:

- Robots become personal care assistants (PCAs). 4.3
- Discussion:
  - “*Robots may be helpful but **NOT** for personal care.*”



## IMPLICATIONS AND RECOMMENDATIONS TO THE STATE OF MINNESOTA:

- In general, the students were very excited to participate in the focus group discussions. They felt a sense of “ownership” and “involvement” by being asked their opinion for future development. When giving consideration for continued process improvement, the State of MN should engage relevant parties.

*“Thanks for including us in the focus groups.”*

- Most of the barriers to accessibility and usage centered on “not knowing” the website existed. To that end, the State of MN should consider implementing a communication plan targeted to the general public, school boards, schools, parents, and students.

*“Advertise the MN website so people will know it is available and to use it.”*

## IMPLICATIONS AND RECOMMENDATIONS TO THE STATE OF MINNESOTA:

- Recommend further research that incorporates the views of parents and teachers; they are the “front line” people for awareness and usage in the future; changing the adult population to “e-government” will likely move slowly. Expand upon the future technology subject areas and get the input so we move forward in an informed way.

*“Include parents and teachers in a focus group” (this from teachers and parents)*

- Future website development areas; learn from focused research input:

*“Many more things could be done on line like drivers licenses; fishing licenses; camping permits”.*

## IMPLICATIONS AND RECOMMENDATIONS TO THE STATE OF MINNESOTA:

- Interactive component to the website; many likely pressing opportunities for “e-government”; the students express strong interest.

*“Online and free university, college, and technical school courses are important; we need them now.”*

## **Future Action Recommendation:**

- A highly relevant research study (summary attached on the next pages) in process for final publication has been completed by Dr. Christine Greenhow, Researcher in Learning Technologies at the University of Minnesota.
- Future action by the State should consider and take into account the findings of this Information Technology Insights focus group study and Dr Greenhow's extensive research.

# RESEARCH SUMMARY

## **Social Networking Sites and Urban Teens Study**

Dr. Christine Greenhow, Researcher in Learning Technologies at the University of Minnesota

Title, Subtitle:

**First-of-its-kind study at the University of Minnesota uncovers the educational benefits of MySpace and Facebook**

~Study finds that low-income students, contrary to recent studies, are in many ways just as technologically savvy as their counterparts~

# Background

- High school students from low-income families in the upper Midwest were surveyed, interviewed, and observed to investigate their use of the Internet and social network sites and examine the connection between students' social network site use and learning.
- We surveyed 600 high school students from low-income families in January 2008 and conducted focus groups to triangulate survey data. Students who participated in this study were from thirteen urban high schools in the upper Midwest (56% female). These students were from families whose incomes were at or below the county median income (at or below \$25,000) and were participating in an after school program, Admission Possible, aimed at improving college access for low-income youth.

## **Study Highlights: The majority of low income teens' use social network sites**

- 77% - had a profile on a Social Network Site
- 65% of students used MySpace most often; Facebook was the second most popular site to use.
- Reasons for using the Social Network site:
  - Keep in touch with friends you rarely see (72%)
  - Keep in touch with friends you see (67%)
  - Make new Friends (54%)

We asked them “Have you learned anything from having used Social Network sites?”

- 65% said “Technology skills”
  - 61% said “Creativity”
  - 46% said “Being open to new or diverse views”
  - 43% said “Communication skills”
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- Moreover, intensity of MySpace use correlated with a perceived connection to learning; students who used their social network at least 3-5 days per week or more were more likely to see a connection between their use of the SNs and learning.



- To further investigate the trends we were seeing in the survey and focus group data, we conducted qualitative case studies involving a randomly selected group of students (all MySpace users).
- Through follow-up in-depth interviews and talk-aloud observations of their MySpace pages with both “high” MySpace users (daily usage for at least 30 minutes) and “low” MySpace users (twice weekly usage for 30 minutes or less) we identified and describe the nuances of their self-reported connections between their social network site use and learning.

- We found that several of the skills educators have identified as essential 21<sup>st</sup> century skills needed by today's students ([National Educational Technology Standards for Students, ISTE, 2007](#)) were evident in what the students were telling us and what we observed on their pages:

## **Technology skills & attitudes**

- using and having a positive attitude toward using technology systems
- selecting, using, and troubleshooting technology applications (e.g., uploading different media files such as photographs, audio, video);

## Technology skills & attitudes

- using various software to create, edit and customize one's own content online)
- thinking about online design/layout
- learning how to copy/paste and “mess with” HTML codes to change the look and functionality of their MySpace background.

# Creativity

- Creating original works as a means of personal or group expression (e.g., writing poetry and sharing it in one's blog; collecting photos from MySpace "Friends" and editing them into an album; creating a video about something you care about and distributing it through the Friends' network)

## Communication & Collaboration:

- communicating ideas effectively to multiple audiences using a variety of media and formats
- interact, collaborate and publish with peers employing variety of digital environments and media (e.g., blog entries and feedback/comments)
- contribute to project teams to produce original works or solve problems
- Examples:
  - Talk about school assignments intersected with purely social talk on MySpace
  - Students would use the network to post a bulletin or email privately for help; then, students instant messaged to discuss the problem/anxiety/issue before returning to school work
  - Students also shared what they were working on (e.g., video created for a class project) and instant messaged about it or left comments about it.
  - For some projects, individuals solicited the network for ideas or artifacts to include in the project

## **Digital Citizenship:**

- Students advocate and practice safe, legal, and responsible use of information and technology; exhibit positive attitude toward using tech that supports collaboration, learning and productivity.
- **Again, formal published results will be available in the coming months.**
- **Low-income teens in our study are Internet-connected (n=600)**

- Almost all of the students surveyed (94%) used the Internet.
- Most students we surveyed have Internet access at home
- 82% go online from home
- 76% have a desktop computer; 30% have a laptop computer
- 50% go online daily, about 25% go online several times/day
- About one quarter of students (27%) reporting use of the Internet 3-5 days a week and 14% reporting that they go online 1-2 days per week.

## **These findings stand in contrast to national survey reports which portray teens from low-income families as relatively technologically impoverished:**

- The Pew Internet and American Life project, “Teens and Technology: Youth are Leading the Way to a Fully Wired and Mobile Nation” (Lenhart, Madden, & Hitlin, 2005) presented findings from a national callback telephone survey of youth ages 12-17 (n=1,100), indicating that teens from the lowest-income families are the least likely to report use of the Internet.
- Teens from households earning under \$30,000 per year are less likely than any other income group to report Internet use. Less than three-quarters (73%) of teens from these families use the Internet.



This is an ongoing study with published results expected in Fall 2008.

Christine Greenhow, Ed.D.

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