

The logo for the National Science Digital Library (NSDL), featuring the letters 'NSDL' in a stylized font with a red square at the end.

ANNUAL MEETING

Celebrating a Digital Decade  
and Envisioning the Next



## Digital Content Trends:

Are we on the same page with today's  
“Free Agent Learners?”

**Speak Up 2009  
National Findings**

**Julie Evans  
Project Tomorrow  
jevans@tomorrow.org**

## Today's Discussion: The Big Questions

- ▶ What are the **expectations of today's K-12 students** for the use of e-textbooks and digitally-rich content and resources within education?
- ▶ How does this student vision **compare with the educators' realities?** What about the **parents' perspective?**
- ▶ What **challenges or obstacles do educators face** in implementing these resources? **What are the benefits?**
- ▶ **What does this mean for the NSDL community?**

## *Today's Agenda:*

- *What is Speak Up?*
- *Selected Data Findings*
- *Meet the “Free Agent Learner”*
- *Conversation Time*

**Speak Up Research Project:  
Views of Students, Teachers, Parents,  
Administrators & Pre-Service Teachers**

# Speak Up National Research Project

## ▶ Annual national research project

- Online surveys + focus groups
- Open for all K-12 schools and schools of education
- Institutions receive free report with their own data

## ▶ Collect ideas ↔ Stimulate conversations

- K-12 Students, Teachers, Parents, Administrators
- Pre-Service Teachers in Schools of Education

## ▶ Inform policies & programs

- Analysis and reporting of findings and trends
- Consulting services to help transform teaching and learning

# Speak Up National Research Project

## ▶ Empowering authentic voices – since 2003:

- 1.6 million K-12 students
- 142,000 teachers
- 82,000 parents
- 10,500 school leaders
- 1,900 pre-service teachers
- 23,000 K-12 schools – from all 50 states, DC, American military base schools, Canada, Mexico, Australia, int'l schools . . .
- 71 schools of education

**1.85 million respondents**



**Speak Up is facilitated annually  
by **Project Tomorrow**  
(formerly known as NetDay)**

***Project Tomorrow  
([www.tomorrow.org](http://www.tomorrow.org))  
is the leading education nonprofit  
organization dedicated to the  
empowerment of student voices in  
education.***

## Speak Up 2009 survey question themes

- **Learning & Teaching with Technology**
- **21<sup>st</sup> Century Skills: Digital Citizenship**
- **Science and Math Instruction**
- **Career Interests in STEM and Teaching**
- **Professional Development / Teacher Preparation**
- **Internet Safety**
- **Administrators' Challenges**
- **Emerging Technologies in the Classroom**
  - *Mobile Devices, Online Learning, Digital Content*
  - *Educational Games, Web 2.0 tools and applications*
- **Designing the 21st Century School**

# ***Participate in Speak Up 2010!***



**Online surveys available for:**

**K-12 students**

**Parents (in Spanish too!)**

**Teachers & Administrators**

**Pre-service teachers**

**Librarians & Technology Coordinators**

**Surveys open for input:  
Oct 18 – Dec 17**

**No fee to participate. No limit on the # of surveys submitted. 100% confidential.**

**Free online report for all Speak Up participating districts w/ your local data: Feb 2011**

**Release of National Speak Up Findings in Congressional Briefings: Spring 2011**



# Activities, Attitudes & Aspirations

## Disconnects & Differences

## Trends & Leverage Points

*Today's Focus: E-Textbooks & Digital Content*



## National Speak Up 2009 Participation: 370,565

✓ K-12 Students	299,677
✓ Teachers	38,642
✓ Parents (in English & Spanish)	26,312
✓ School/District Administrators	3,947
✓ Schools / Districts	5,757 / 1,215
✓ Pre-Service Teachers	1,987
✓ Schools of Education	71

Participating States = all 50 states

**Top 12 (# of participants):**

**TX, AZ, AL, CA, FL, MD, PA, NC, AR, MO, NY, IL**

**National Speak Up 2009 Participation: 370,565**



## **About our K-12 Schools:**

- 97% public, 3% private
- 38% urban, 31% suburban, 32% rural
- 54% Title 1 eligible – indicating community poverty
- 42% majority-minority student population

## **About our Schools of Education/Aspiring Teachers**

- 89% four year public institutions
- 2/3 undergraduates; 1/3 graduate students



Release of two national reports  
March 16 and May 5, 2010



▶ **Creating Our Future:**

**Students Speak Up  
about their Vision for  
21st Century Learning**

**Speak Up 2009 National  
Findings: K-12 Students &  
Parents**

▶ **Unleashing the Future:**

**Educators Speak Up  
about the Use of  
Emerging Technologies  
for Learning**

**Speak Up 2009 National  
Findings: Teachers, Aspiring  
Teachers & Administrators**

*Both are available at [www.tomorrow.org](http://www.tomorrow.org)*

## Key Findings: Speak Up 2003 – 2010

- ▶ Students function as a “**Digital Advance Team**”
- ▶ Students regularly **adopt and adapt** emerging technologies for learning
- ▶ Students’ **frustrations** with the unsophisticated use of technologies within education
- ▶ **Lack of relevancy** in education exacerbated
- ▶ **Persistent digital disconnect between students and adults**

***What can the Speak Up  
findings tell us about the  
future of learning?***

*What can the Speak Up data tell us about the future of learning?*



**Increasingly, K-12 students' aspirations around the use of emerging technologies within education is a reflection of their desired vision for learning in general.**

*Result:*

A new uniquely “student vision”  
for leveraging emerging  
technologies to drive achievement  
and educational productivity



# Creating Our Future: Students Speak Up about their Vision for 21st Century Learning



## *Three Essential Elements in the Student Vision*

- ▶ **Social-based learning**
- ▶ **Un-tethered learning**
- ▶ **Digitally-rich learning**

# Creating Our Future: Students Speak Up about their Vision for 21st Century Learning

## *Three Essential Elements*

### ▶ **Social-based learning**



**Students want to leverage emerging communications and collaboration tools to create personal networks of experts**

# Creating Our Future: Students Speak Up about their Vision for 21st Century Learning



## *Three Essential Elements*

### ▶ **Un-tethered learning**



**Students envision technology-enabled learning that transcends classroom walls**

# Creating Our Future: Students Speak Up about their Vision for 21st Century Learning



## *Three Essential Elements*

### ▶ **Digitally-rich learning**



**Students see the use of relevancy-based digital tools, content and resources as key to education productivity**

# Creating Our Future: Students Speak Up about their Vision for 21st Century Learning



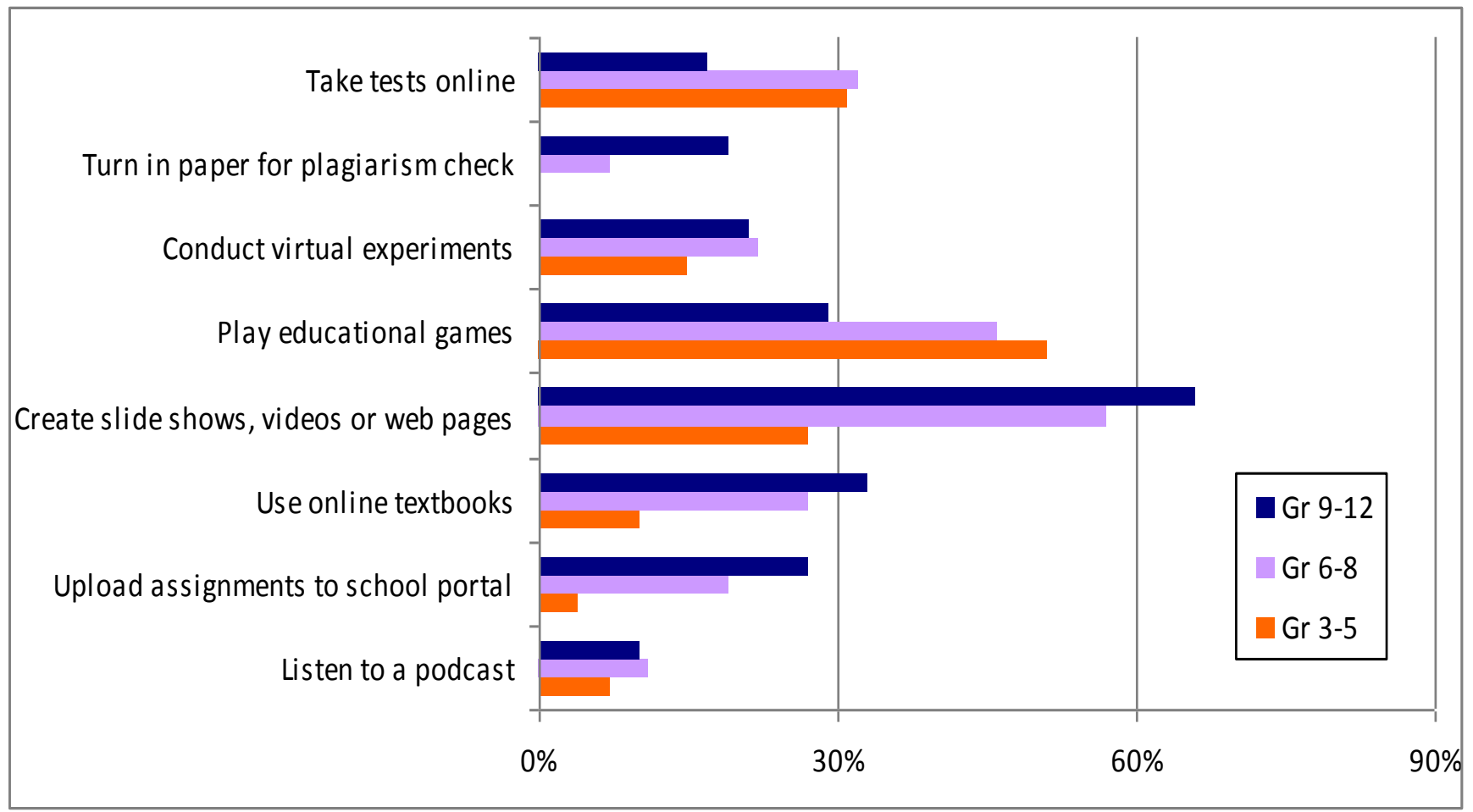
## *Three Essential Elements*

### ▶ **Digitally-rich learning**

- ❑ Online textbooks
- ❑ Games
- ❑ Simulations and animations
- ❑ Creating using digital media



# How K-12 students are currently using digital resources for schoolwork



**What if ....**

**We asked students (and parents) to design  
the ultimate digital or e-textbook?**

**What features and functionality would they  
desire?**

# K-12 students' desires for the features and functionality of digital textbooks

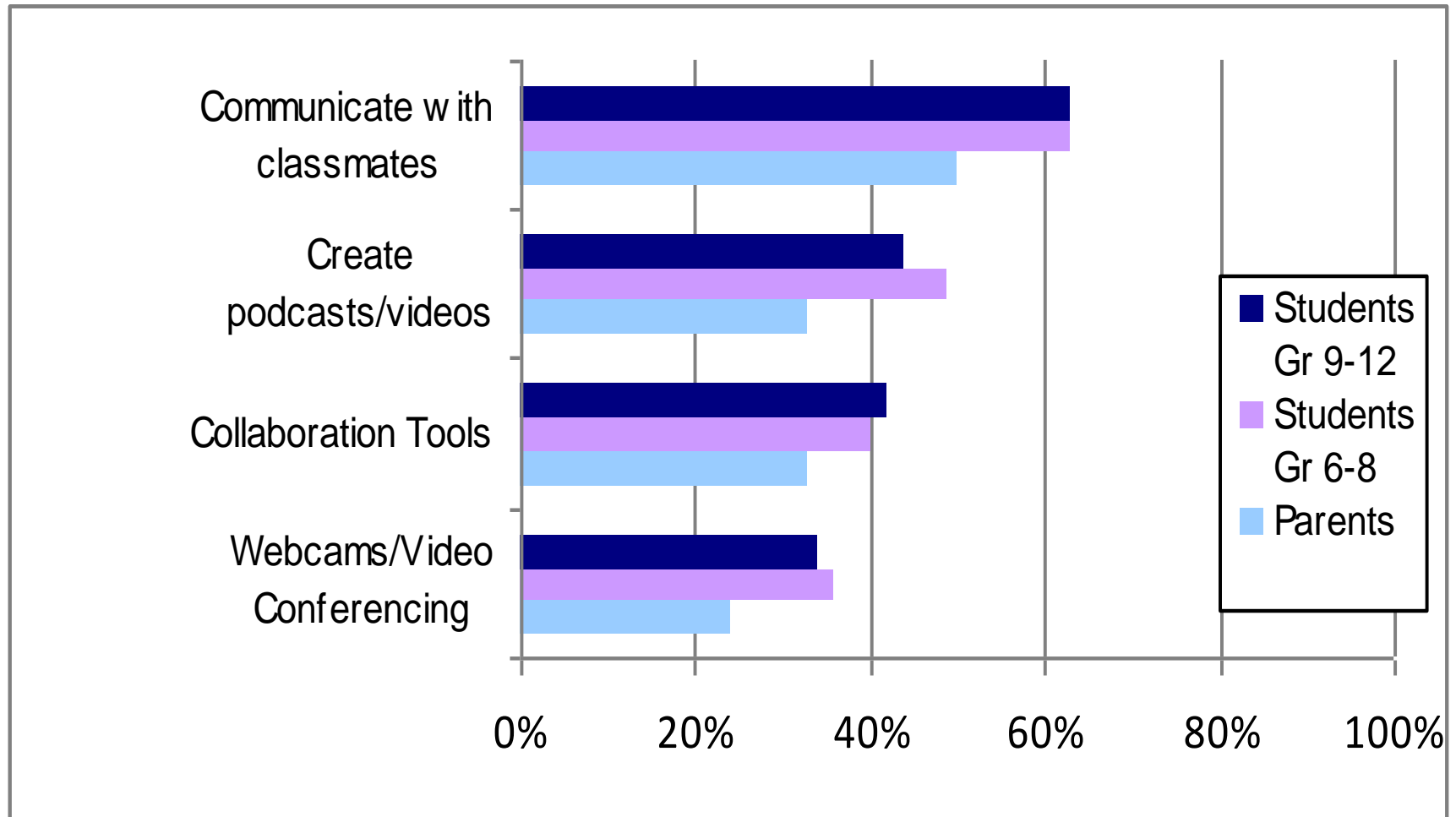


*Three themes emerge from the data:*

- Students want interactivity and relevancy
- They want tools to facilitate collaboration
- They want ways to personalize learning

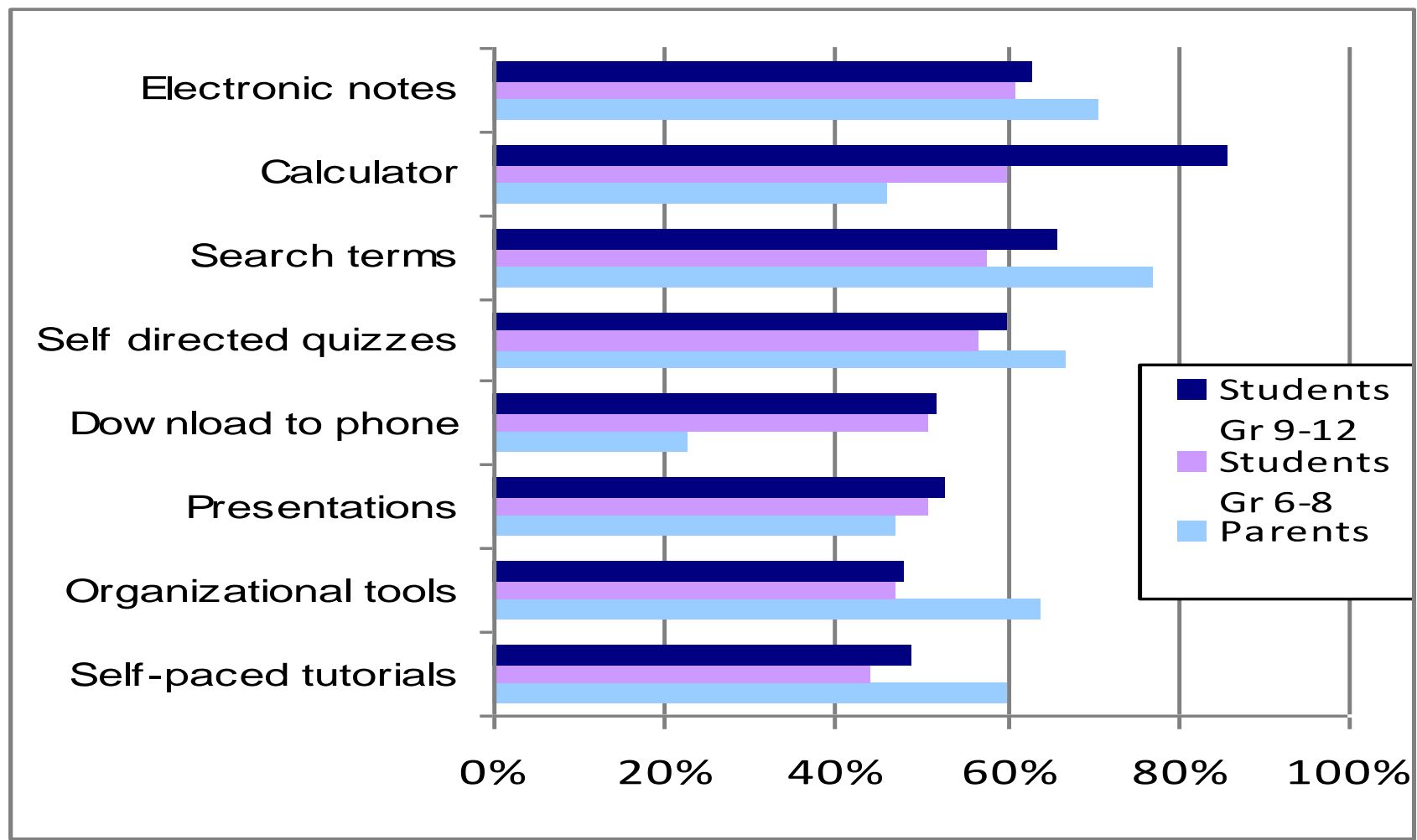


# K-12 students want their digital textbooks to facilitate collaboration

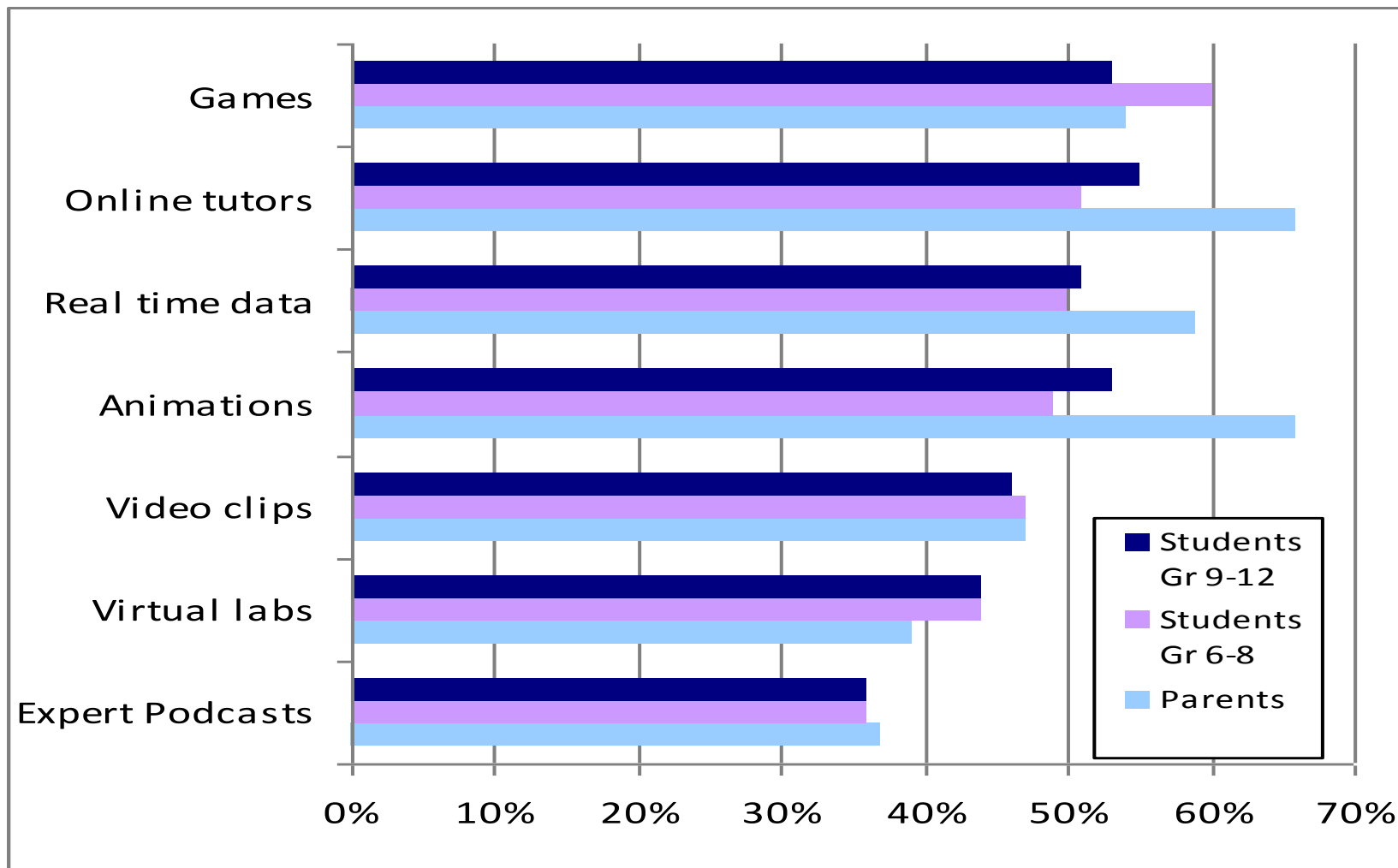




# Students want to use their digital textbooks to personalize learning



# K-12 students want their digital textbooks to be interactive and relevant



# Why do parents think the use of educational games can drive achievement?

- Appeals to different learning styles 76%
- Increases student motivation and engagement 76%
- Helps students develop problem solving skills 57%
- Provides environment to visualize difficult concepts 56%
- Develops creativity 53%
- Students get immediate feedback 52%
- Experience through trial and error is good 50%

# Unleashing the Future: Educators “Speak Up” about the Use of Emerging Technologies for Learning



**What is the value proposition for  
technology in education?**



Audience response

**Who do you think is most “bullish” on the importance of effective use of technology for student success? (Besides students!)**

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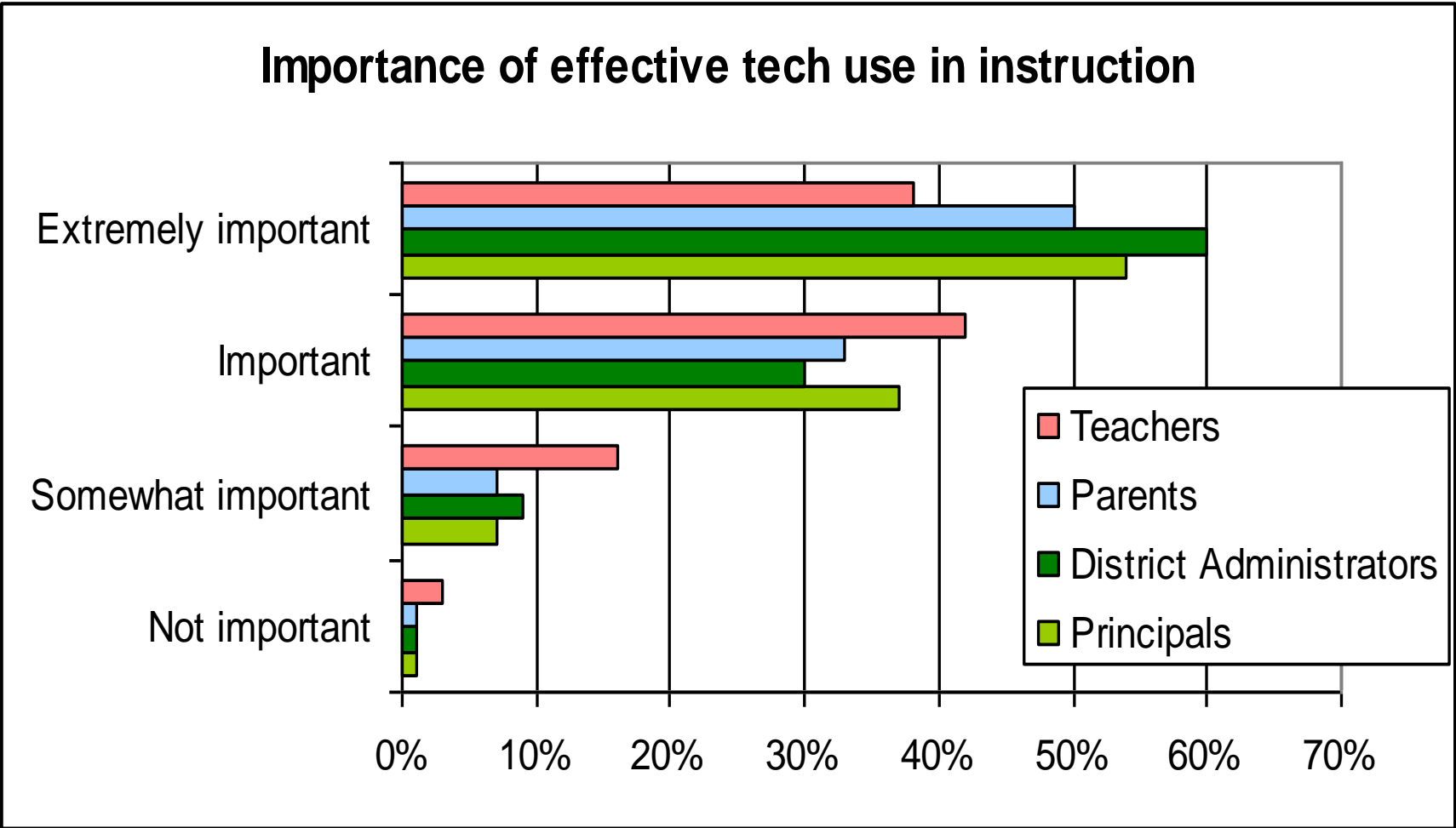
Parents

District administrators

School principals

Teachers

# What is the value proposition for technology in education?

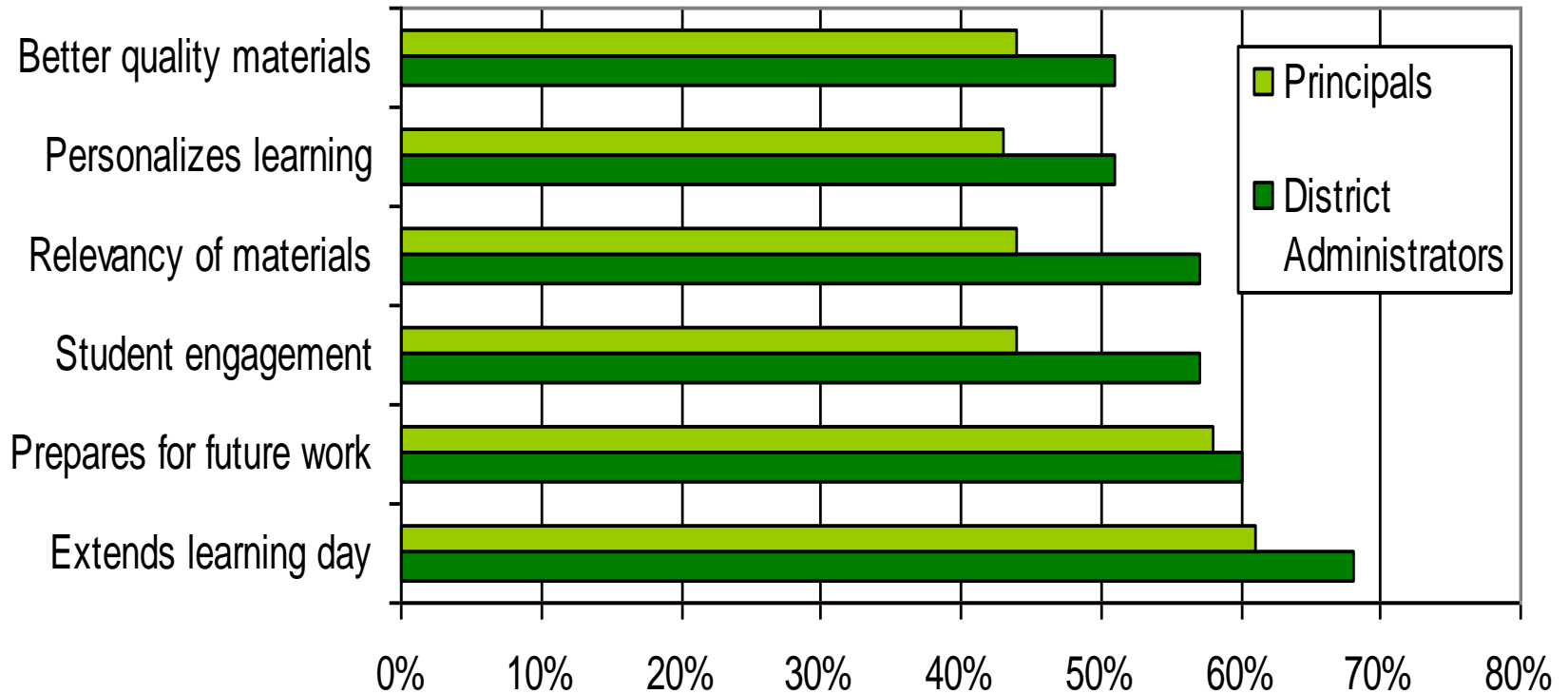




# Administrators' Perspectives: Digital Content



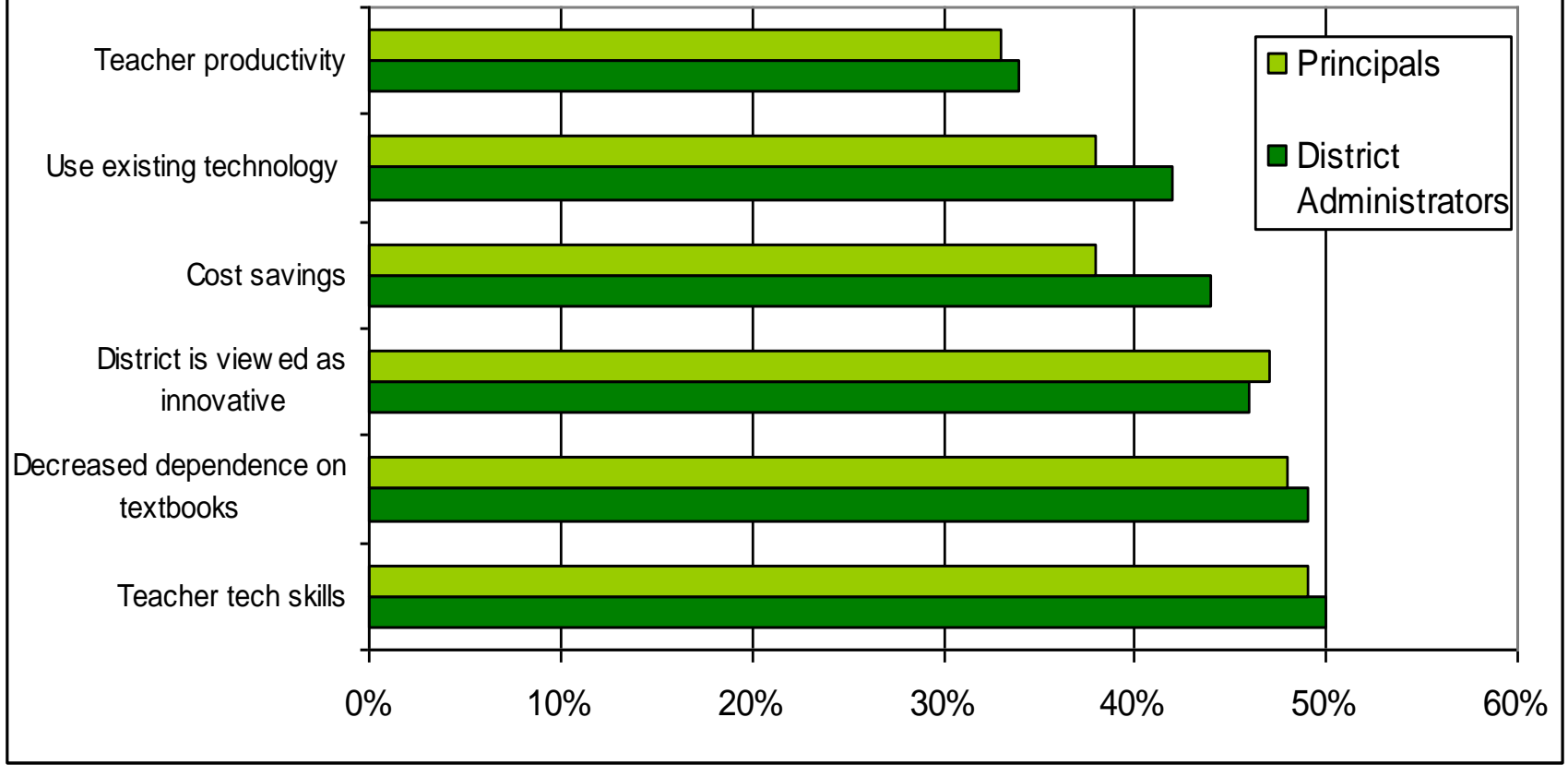
## Value Proposition for Digital Content: Student Impact



# Administrators' Perspectives: Digital Content



## Value Proposition for Digital Content: District Impact



## Administrators' Perspectives: Digital Content

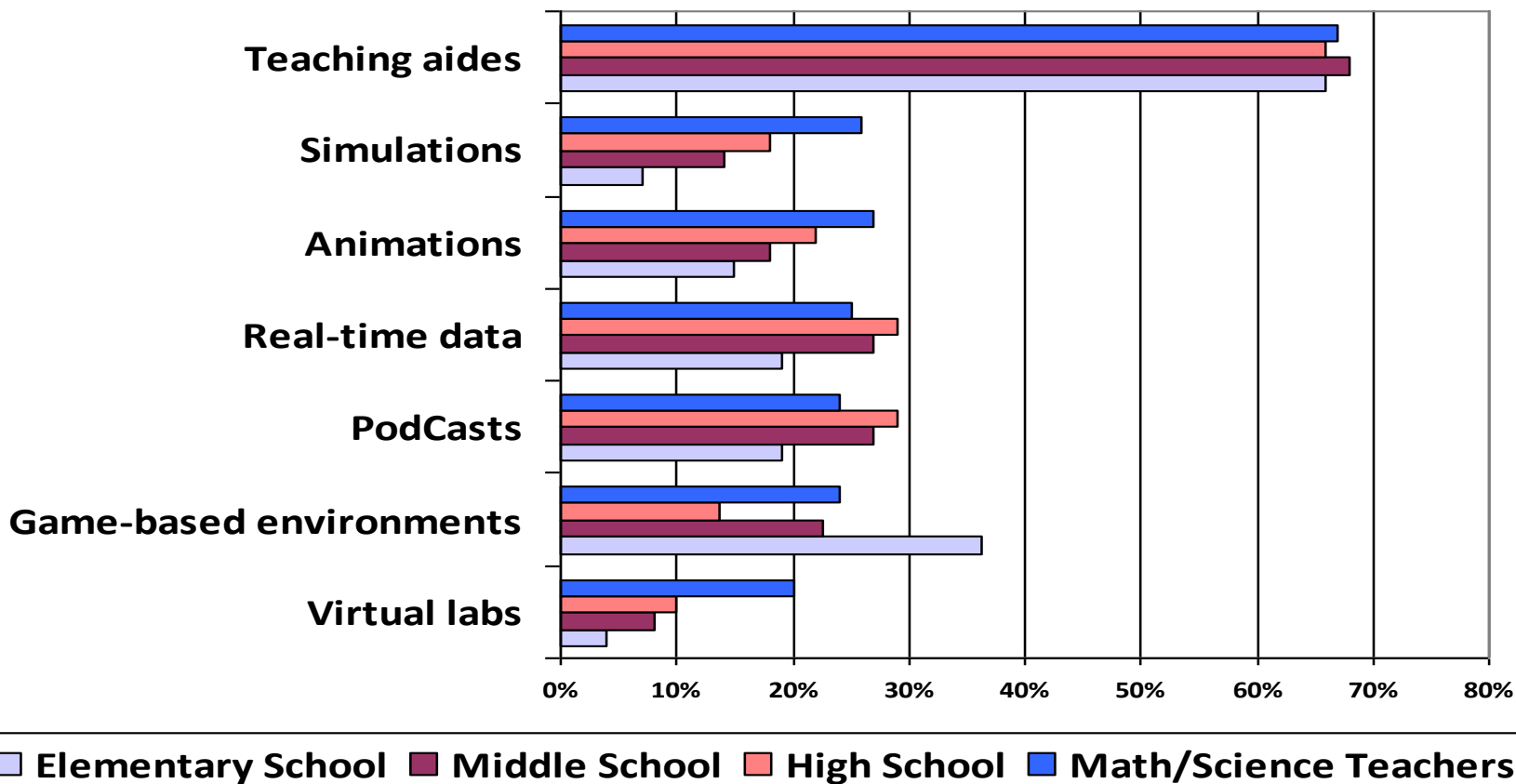
### Barriers to implementing digital resources within curriculum:

	<b>2008</b>	<b>2009</b>
• Teachers are not trained in how to use	40%	43%
• Not enough computers to use	40%	35%
• Lack of funds to purchase resources	30%	30%
• Can't use instructional materials funds	28%	15%
• Not a priority	16%	11%



# K-12 Teachers and Digital Content

## What kinds of digital content are teachers using?



# Pre-Service Teachers vs. K-12 Teachers: Usage of Digital Content



## Pre-Service Teachers

- ▶ Teaching aides (58%)
- ▶ Online curriculum (49%)
- ▶ Online textbooks (40%)
- ▶ Podcasts and videos (39%)
- ▶ Animations (21%)

## K-12 Teachers

- ▶ Teaching aides (66%)
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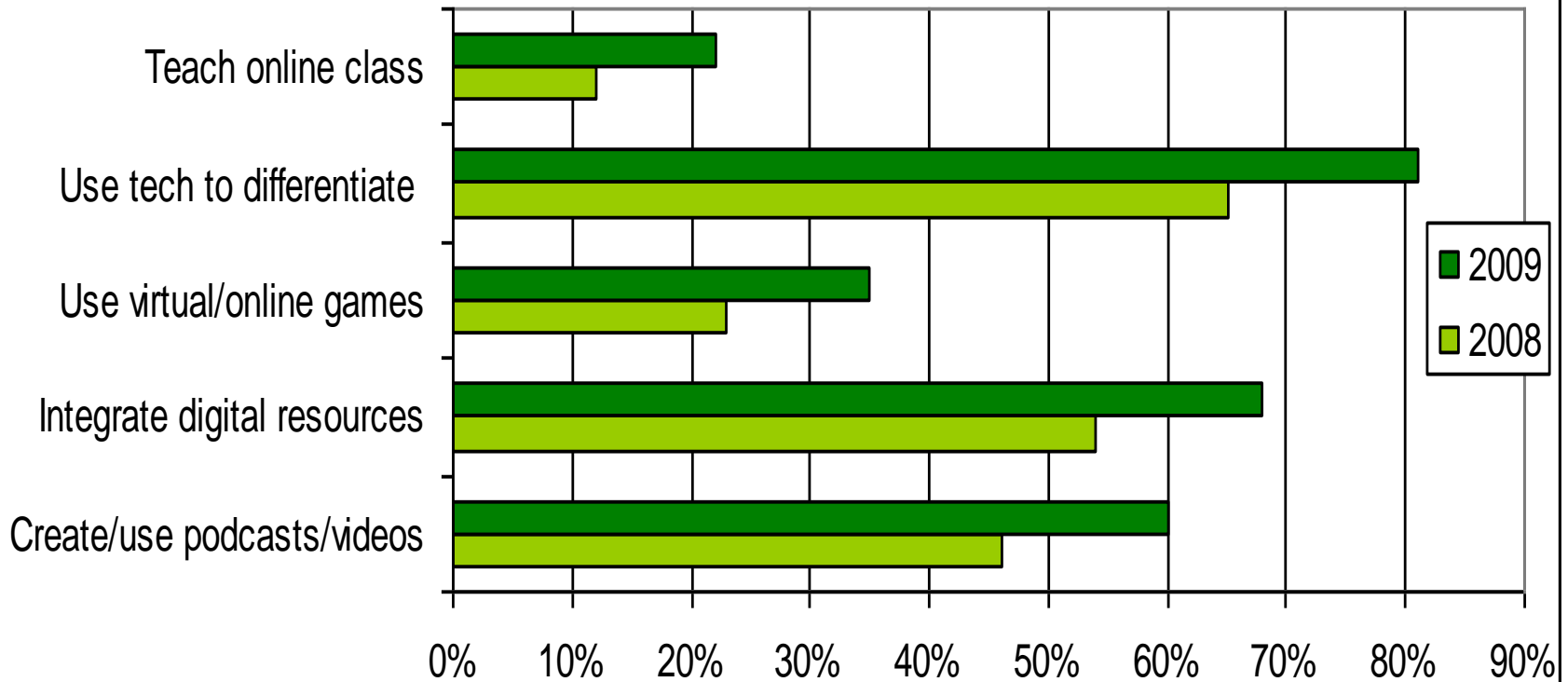
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**No real change in K-12 teachers data from 2008 to 2009**

# Administrators: What kinds of skills do you want in your next generation of teachers?

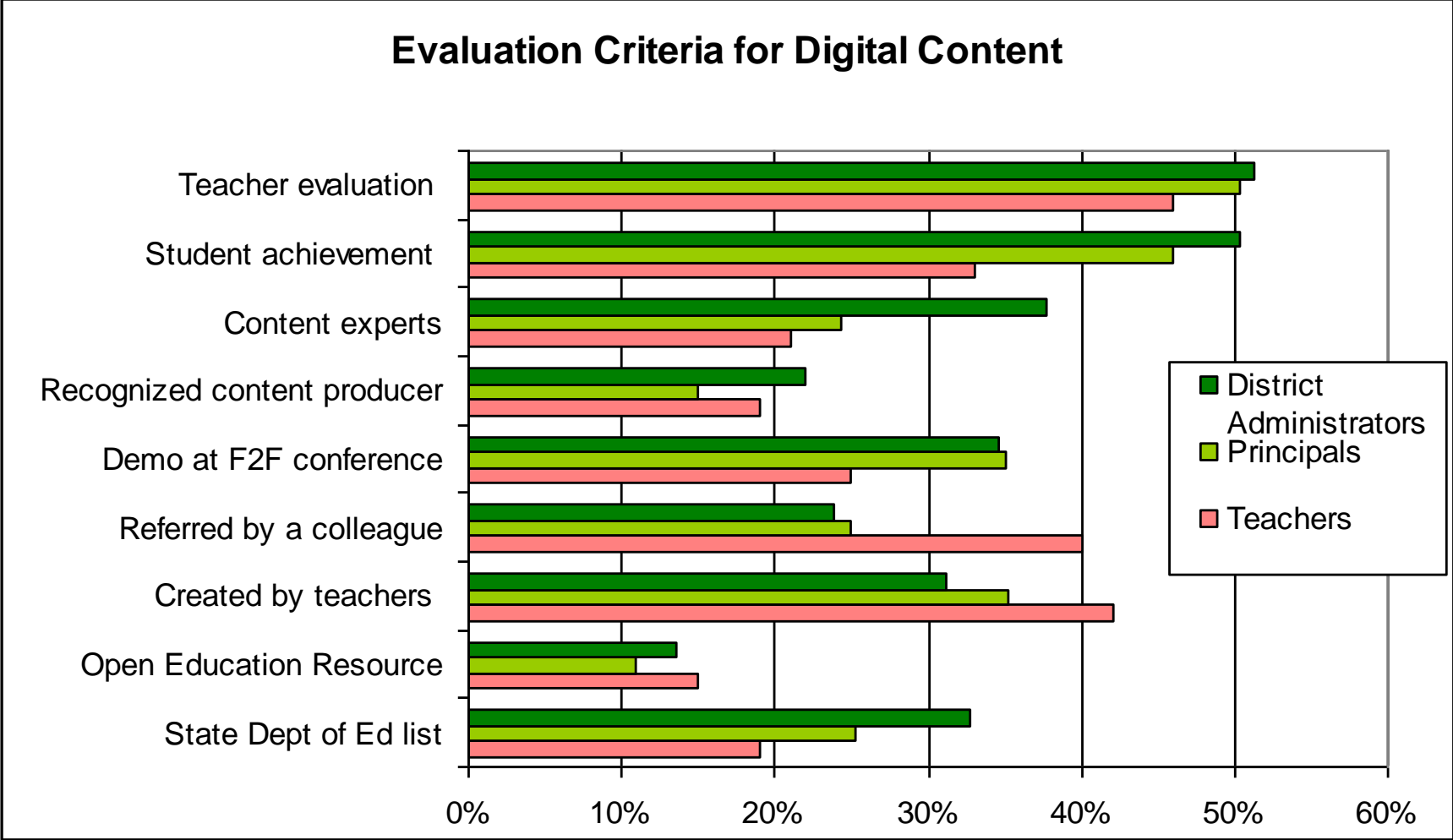
## Administrators' Skill List for New Teachers



# Administrators' Perspectives: Digital Content



### Evaluation Criteria for Digital Content





**Imagine you are designing the  
ultimate school.**

**Which technology tools and services  
would have the greatest positive impact  
on learning?**

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***Are we all on the same page?***

# Creating Our Future: Students Speak Up about their Vision for 21st Century Learning



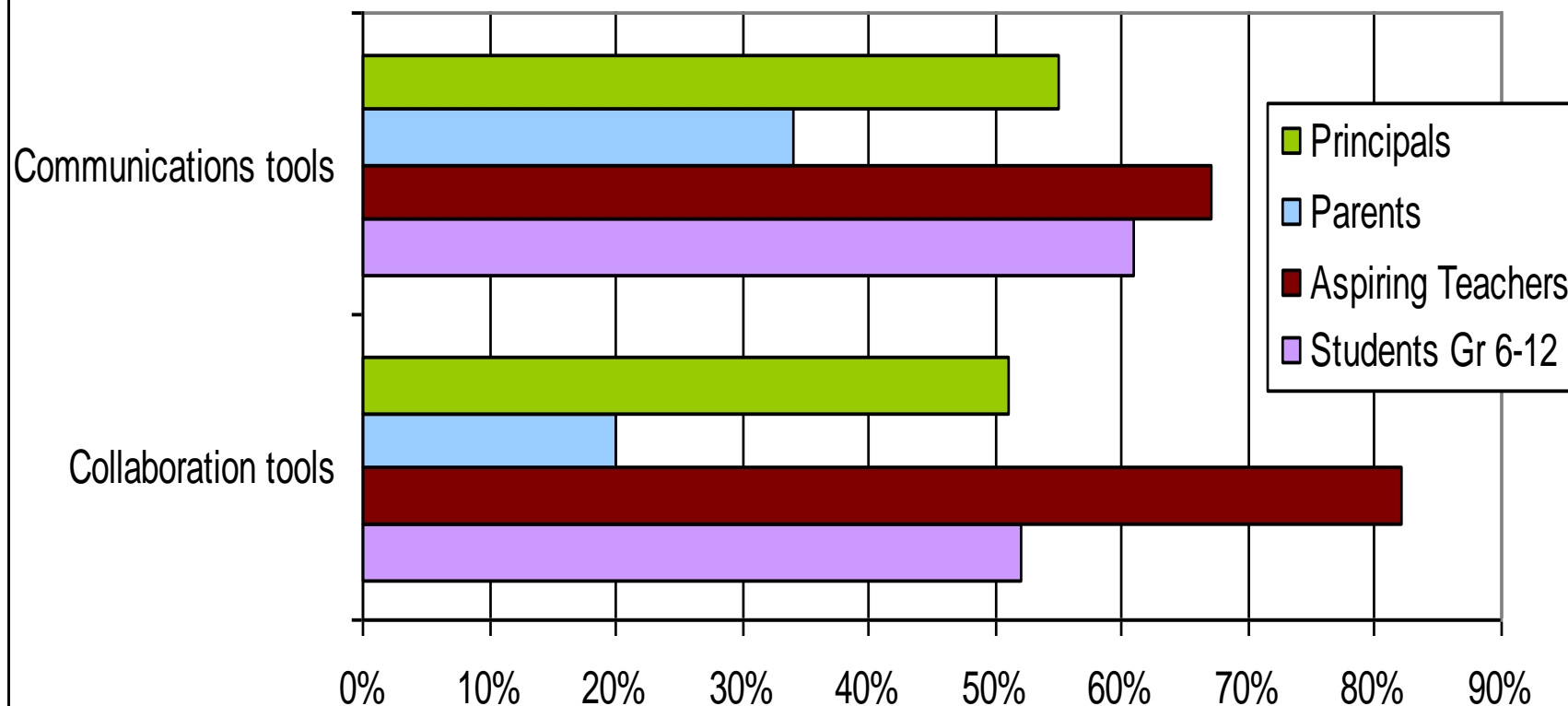
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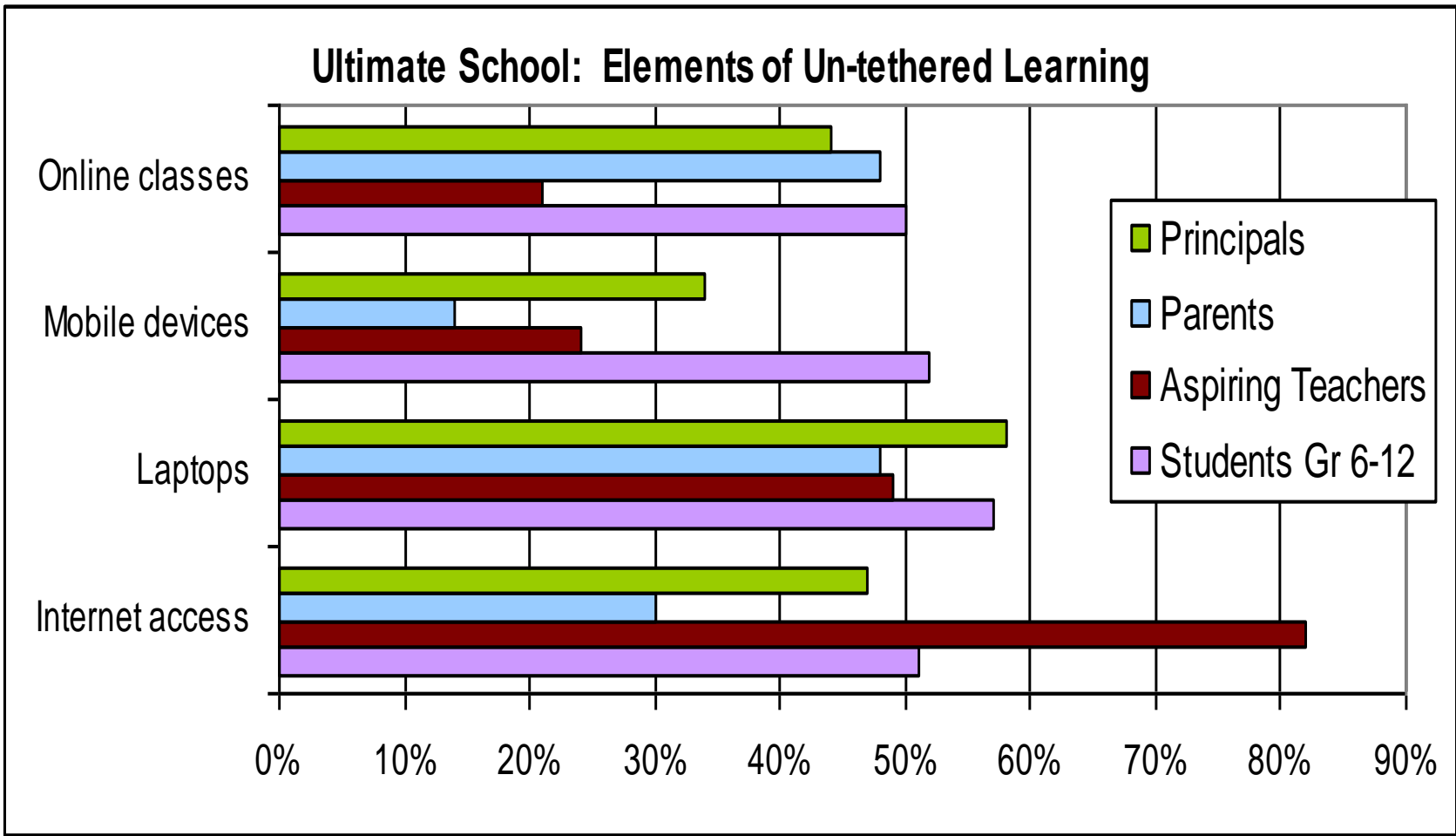
# The Ultimate School: Are we on the same page?

## Ultimate School: Elements of Social Based Learning





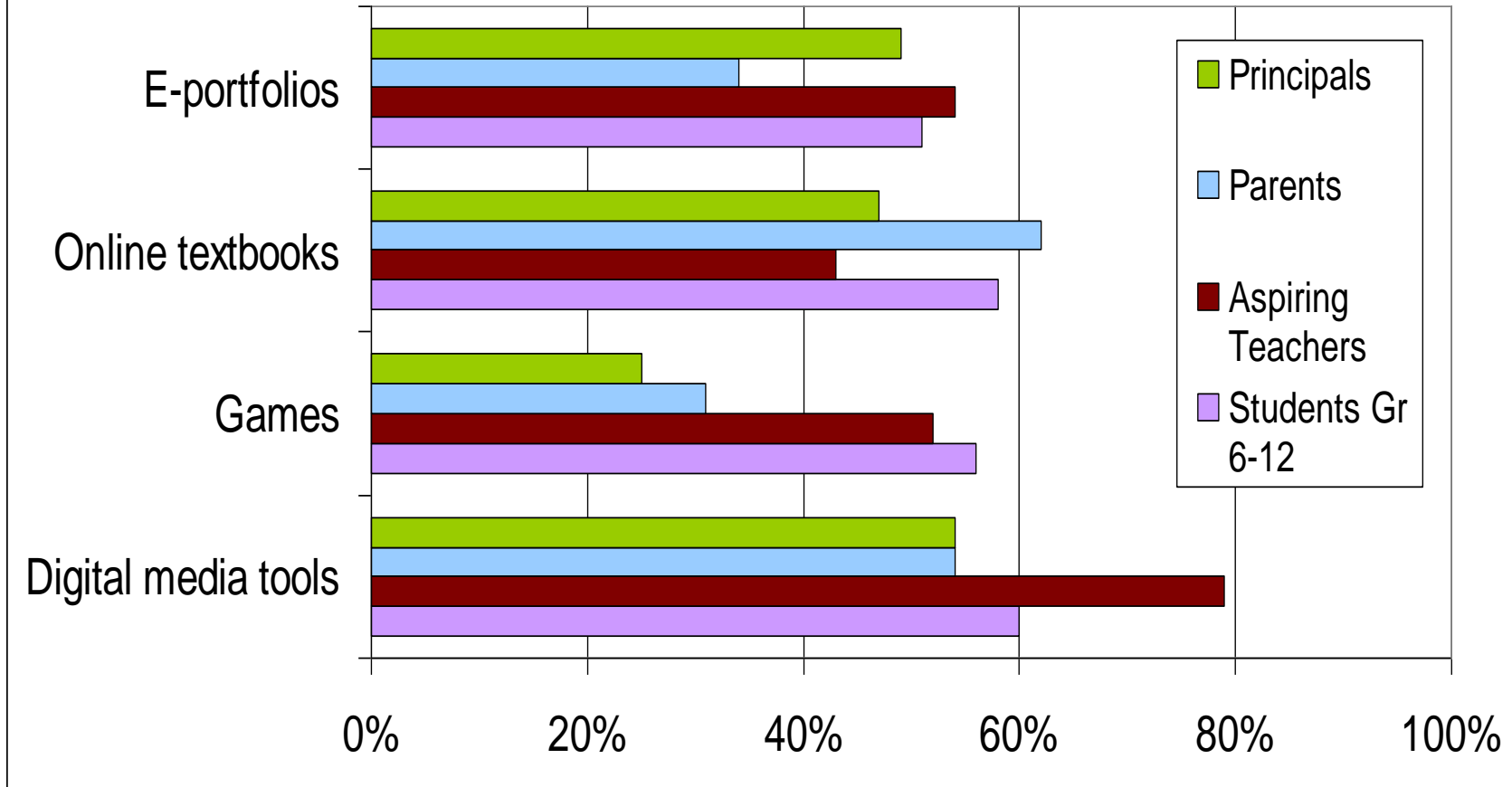
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# The Ultimate School: Are we on the same page?

## Ultimate School: Digitally Rich Learning Environments



# *Recommendations from the K-12 “Digital Advance Team”*

## Learning that is



- **Enabled**
- **Engaging**
- **Empowered**

# Speak Up 2009 National Data Findings

## The era of the technology-enabled Free Agent Learner



# Meet the Free Agent Learner!



## Key Characteristics:

- ▶ Self directed learning
- ▶ Un-tethered to traditional education
- ▶ Expert at personal data aggregation
- ▶ Power of connections
- ▶ Creating new networks of experts
- ▶ Experiential learning is key – make it real
- ▶ Everyone is a content developer
- ▶ Process as important as knowledge gained

# Meet the Free Agent Learner!



## Sampling of activities

Searched online for self-directed learning	37%
Found podcasts/videos to learn about something	23%
Took an online test or assessment on their own	18%
Used cell phone apps to self organize	17%
Used online writing tools to improve writing skills	14%
Found experts online to answer questions	12%

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**Who is this?**



**Say hello to the  
Free Agent  
Learner –**

**a typical middle  
school student!**

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## More Speak Up? [www.tomorrow.org](http://www.tomorrow.org)

- ▶ National Speak Up Findings
- ▶ Additional data analysis from Speak Up 2009
- ▶ Presentations, podcasts and webinars
- ▶ Evaluation services
- ▶ Reports and white papers



**New report on mobile learning!**

Thank you.  
Let's continue this conversation.

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949-609-4660 x15

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