# Engaging the Hopelessly Distracted: Using Mobile ARS in the Classroom

## Practical Uses at the UAL

**Tatiana Usova, Denis Lacroix, Christina Hwang**

UNIVERSITY OF ALBERTA
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# Agenda

- Definitions
- Engagement Theory
- Technology in Academia
- North America ARS use
- Nuts and bolts of Poll Everywhere
- U of A applications
- Questions

PE question:
http://www.polleverywhere.com/multiple_choice_polls/OTQxMzQ0MjE5

# Definition of ARS

**Audience Response System** is an interactive polling device that allows powerful data collection and its analysis.

**Mobile ARS** gathers questions and feedback from audiences in real-time via text messaging, Twitter, or on the web.

Other terminology: Mobile Response System (**MRS**), Classroom Response System (**CRS**), Student Response System (**SRS**).

JAMES E. CÔTÉ *and* ANTON L. ALLAHAR

# LOWERING HIGHER EDUCATION

THE RISE OF CORPORATE UNIVERSITIES
*and*
THE FALL OF LIBERAL EDUCATION

# National Survey of Student Engagement (NSSE) 2011

2 million students (USA, Canada) surveyed
18 Western Canadian Universities and colleges

**Figure 1: Active and collaborative learning**

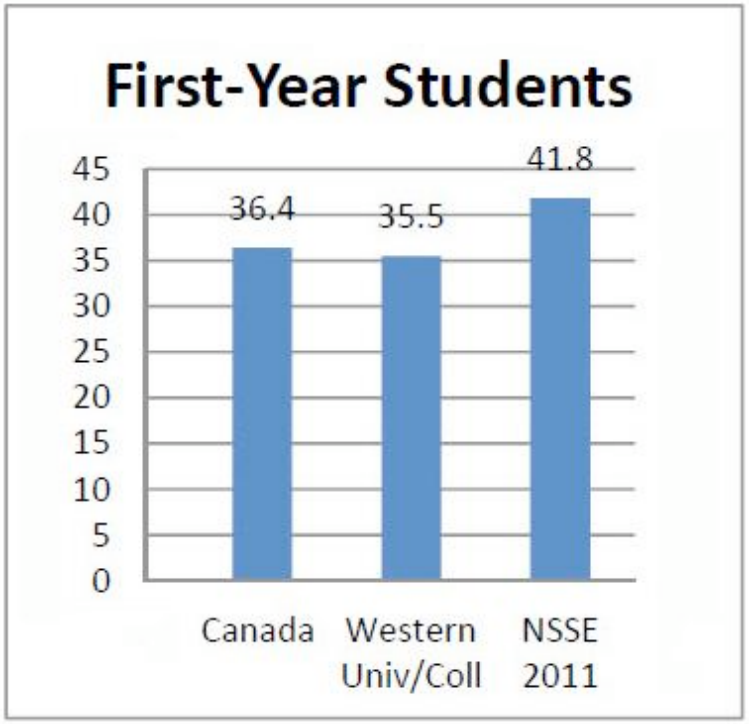
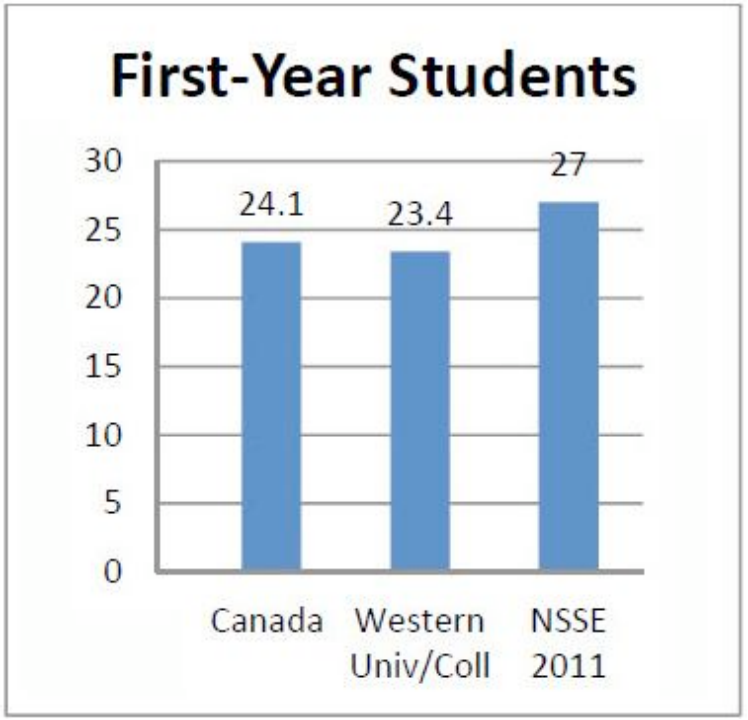
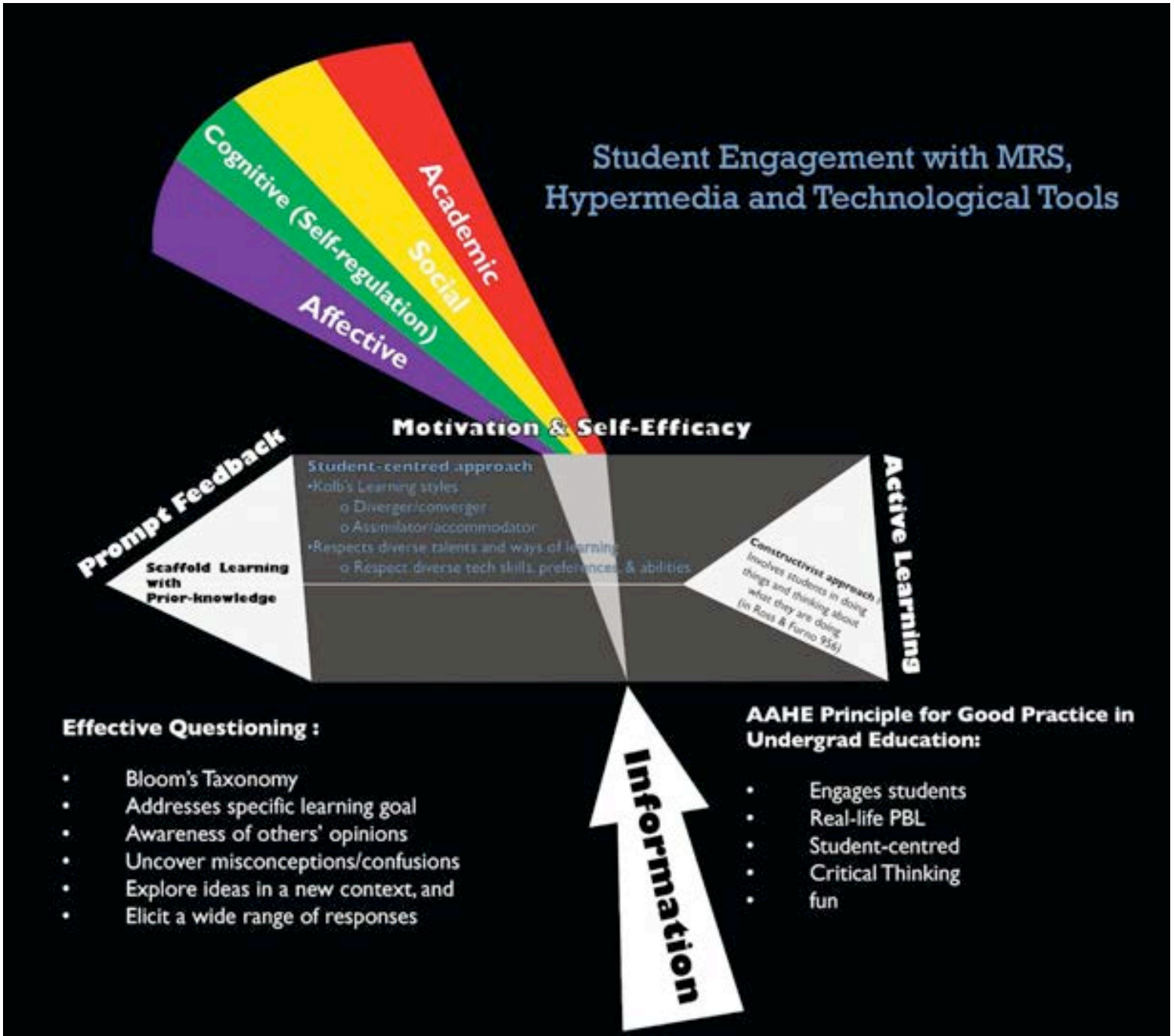



**Figure 2: Enriching Educational Experiences**



# Student Engagement with MRS, Hypermedia and Technological Tools

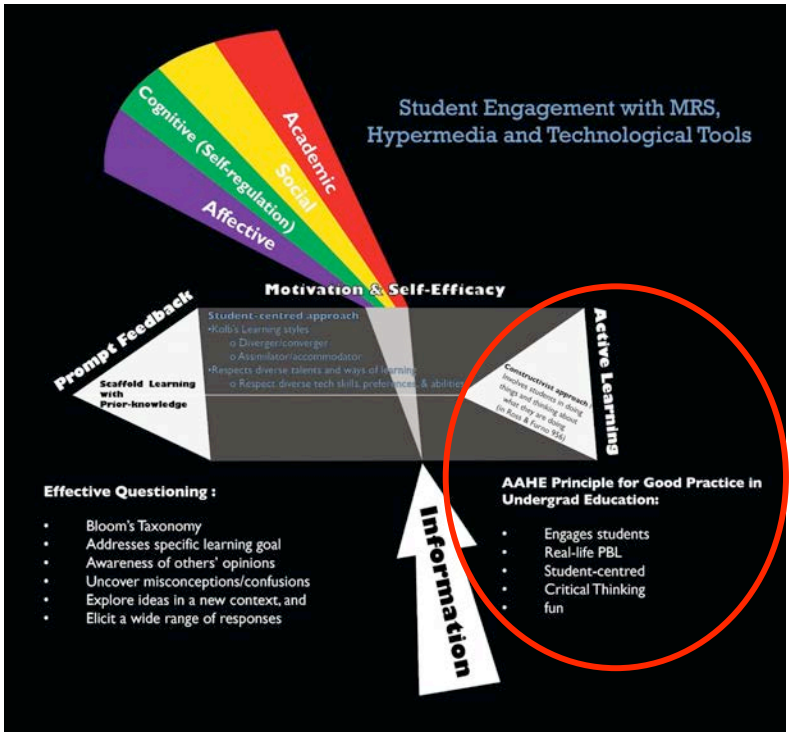



**Effective Questioning :**

- Bloom's Taxonomy
- Addresses specific learning goal
- Awareness of others' opinions
- Uncover misconceptions/confusions
- Explore ideas in a new context, and
- Elicit a wide range of responses

**AAHE Principle for Good Practice in Undergrad Education:**

- Engages students
- Real-life PBL
- Student-centred
- Critical Thinking
- fun


## AAHE Principle for Good Practice in Undergrad Education:

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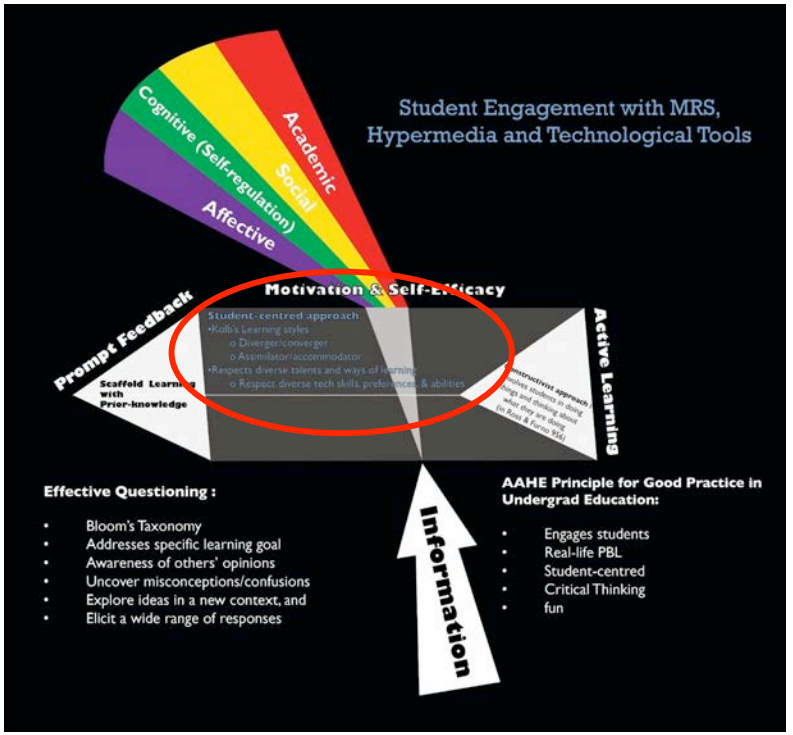
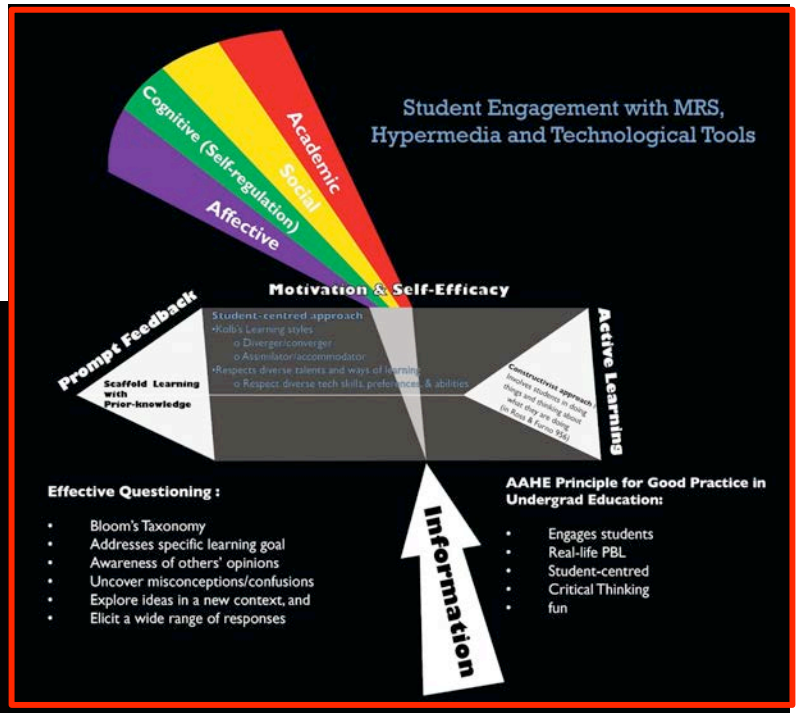
# Learning Styles




## Student-centred approach

- Kolb's Learning styles
  - Diverger/converger
  - Assimilator/accommodator
- Respects diverse talents and ways of learning
  - Respect diverse tech skills, preferences, & abilities

# Student Engagement



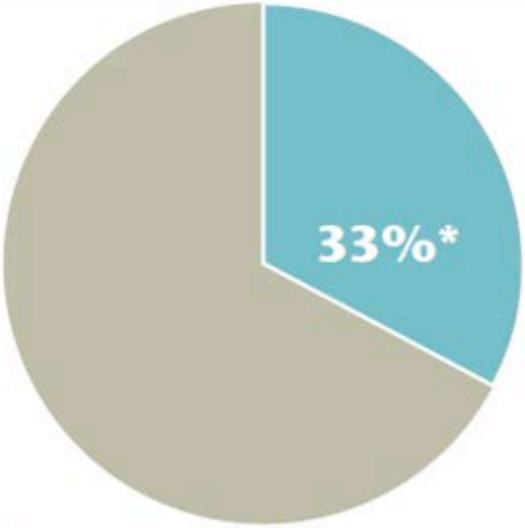

Cognitive (Self-regulation)
Academic
Social
Affective
Motivation & Self-Efficacy

# Major Benefits of Technology for Academic Success

The major academic benefits of technology encompass four areas:

1.Technology gives students easy access to resources ...
2. Technology makes students more productive.
3. Technology helps students feel connected.
4. Technology can make learning a more immersive, engaging, and relevant experience.

**Source**: ECAR National Study of Undergraduate Students and Information Technology, 2011



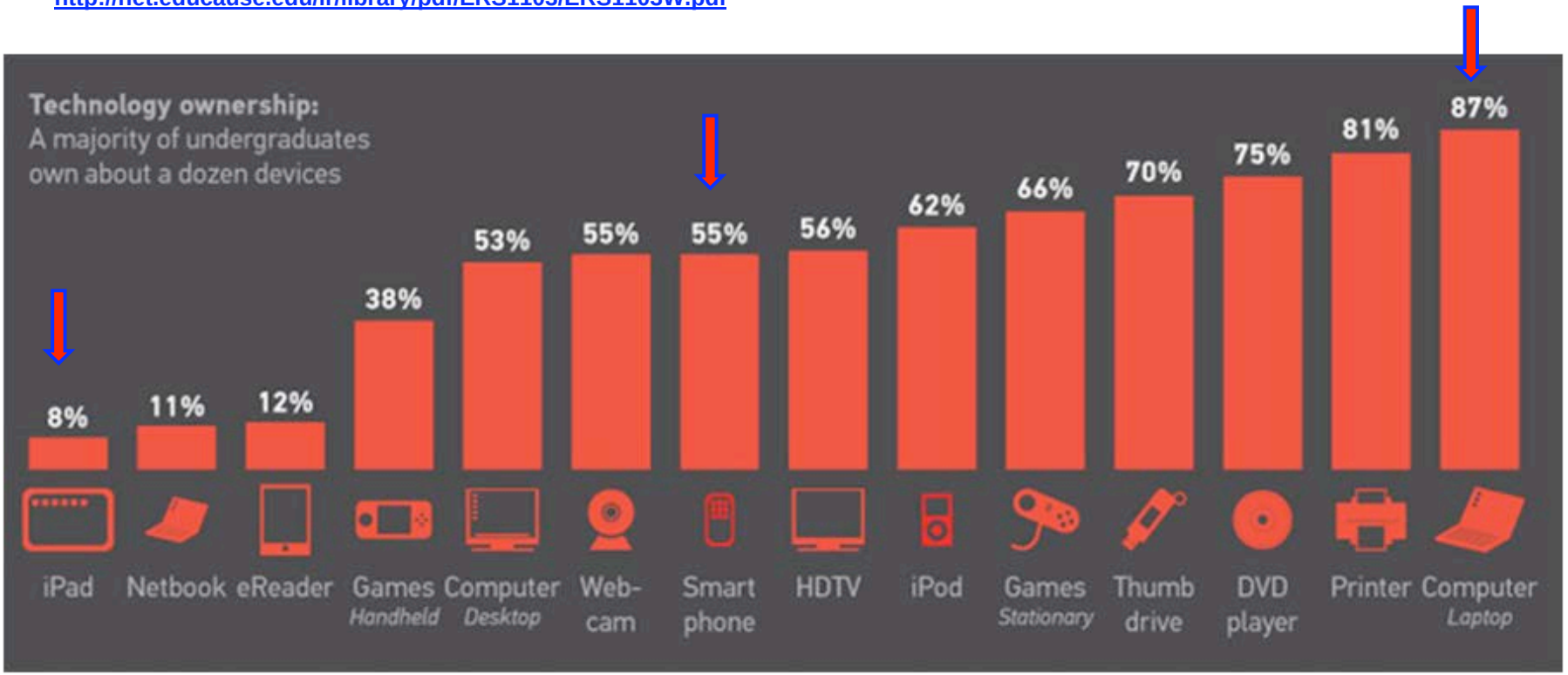

**Makes Learning More Engaging and Relevant**

- Makes learning more creative
- Makes learning more fun
- Helps me think out of the box
- Makes learning more relevant to real life
- Makes learning more engaging
- Elevates teaching
- Helps me reach my academic potential
- Helps me take control of my learning
- Extends learning beyond the classroom
- Prepares me for the workforce
- Prepares me for graduate school

# Technology Ownership

## Study of Undergraduate Students and Information Technology, 2011

Results from 3,000 college students from 1,179 colleges and universities
http://net.educause.edu/ir/library/pdf/ERS1103/ERS1103W.pdf



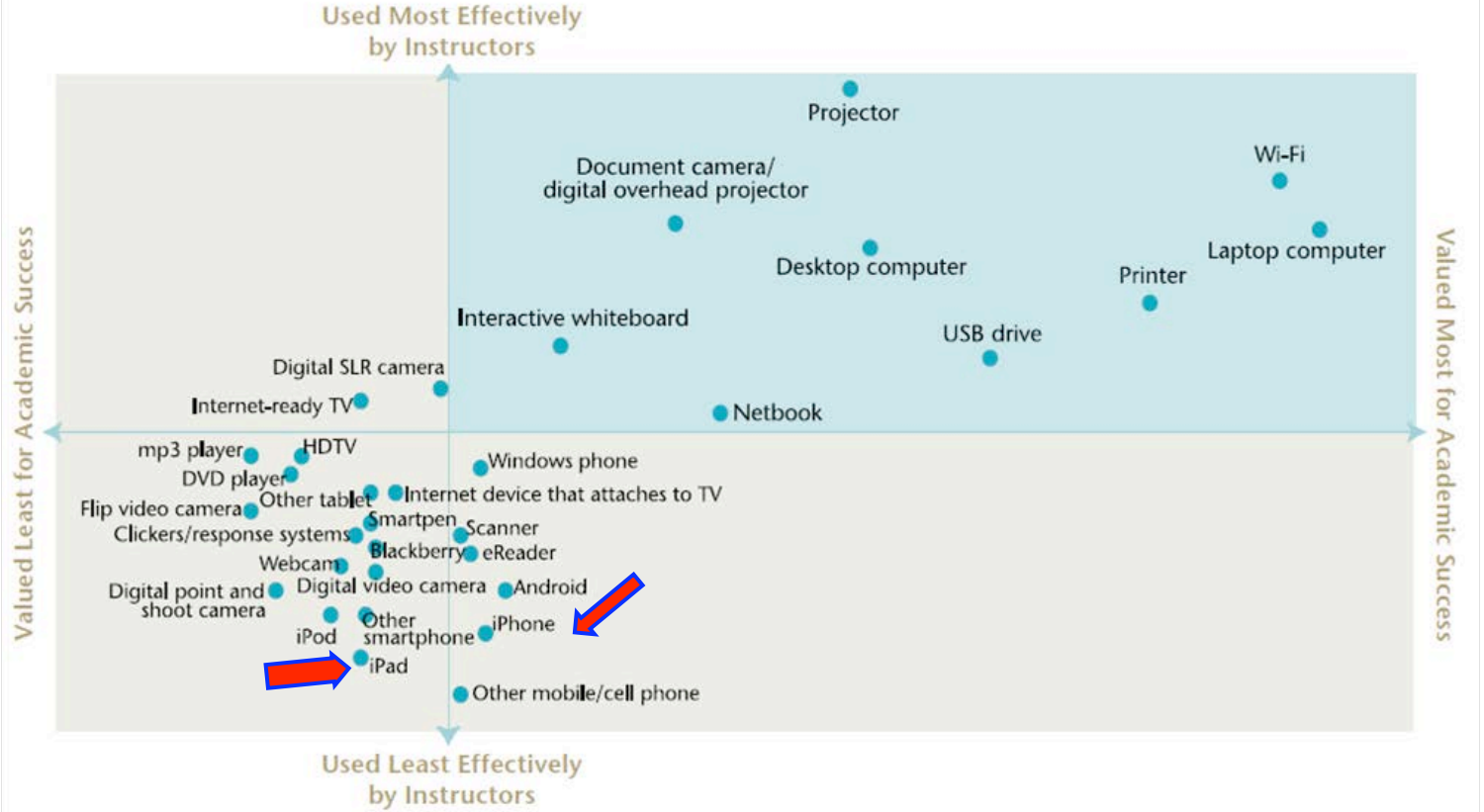
**Instructors at research universities institutions use more technology ...**
Percentage of students who say their instructors use technology:

| | Associate's | Doctorate |
|---|---|---|
| Projector | 59% | 79% |
| Laptop computer | 53% | 76% |
| Wi-Fi | 35% | 52% |
| Student response systems | 15% | 52% |
| Document camera/digital projector | 31% | 45% |
| Thumbdrive/portable hard drive | 32% | 40% |
| Interactive whiteboard | 23% | 31% |

About 1 in 3 students (31%) think the instructor often requires the help of others to get technology up and running successfully

More than 1 in 2 students (51%) think they know more about how to use technology than their professors

Figure 7. **Students' Value of Technologies Correlates with Effective Use by Instructors**



# ECAR Recommendations:

•Investigate *your* students' technology preferences and create an action plan to better integrate technology into courses

•Make more and **better use of technologies that students value** —and that are easily integrated into learning experiences in the shared environments in higher education (e.g., tablets, smartphones, student response systems or clickers)

•**Use technology** in more transformative ways, such **as participatory and collaborative interactions**, and for learning that is engaging and relevant to students' lives and future plans

•Give students different options for interacting with instructors

•Move strategically toward blended/hybrid learning environments to **meet students' preferred styles of learning**. Offer many different ways for students to engage in learning using technology and meet differentiated needs


i·clicker
i·clicker
CLASSROOM RESPONSE SYSTEM
i·clicker


XPS

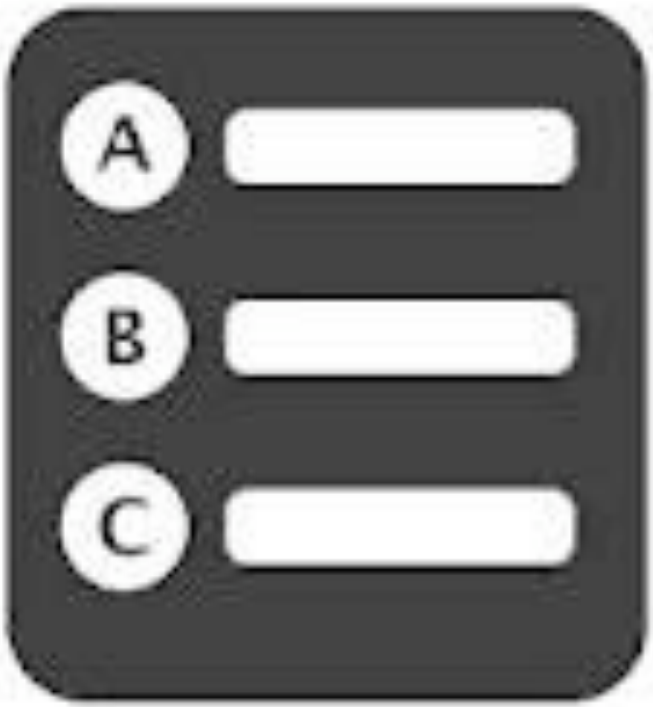

MY SHORTCUTS


Algebra 1


Compose SMS
To:
22333
Message:
1234
[ SEND ]
Carrier
11:02 AM
http://poll4.com
Poll Everywhere
1234
Submit
Enter a keyword and press submit

# "Variations"

| Name | Cost | Web/App/ SMS | Question Type | PPT/ Twitter/ Prezi | Max. Resp. | Analytics | Comments |
|---|---|---|---|---|---|---|---|
| eClicker Host | P: $9.99/ app | iOS app | MC, TF | No | 64 iPad, 32 iPhone /iPod touch | No | Requires same Wi-Fi network and free student app |
| Poll Everywhere | Free up to 40 Resp. | Web, MS | MC, TF, OE | All | Based on subscription | Only for paid subscription | Turn on PowerPoint Macros |
| mClk | $35+ /month | SMS | MC, TF, OE | PPT only | Based on subscription | No | Only SMS |
| Web Clicker (iClicker) | Resp.: $10/180 days P: license | App | MC, TF | No | Based on subscription | Yes | * See notes below. |
| SMART Response VE | Contact reseller | Web only | MC, TF | No | Based on subscription | Yes | ** See notes below. |
| Mentimeter | Free | Web only | MC, TF | No | Unlimited | No | No login, fast, quick & easy |
| Socrative | Free | Web only | MC, TF, OE | No | Unlimited | No | Open source, multiple polls |


A
B
C


“?!?”

# What is enthalpy?

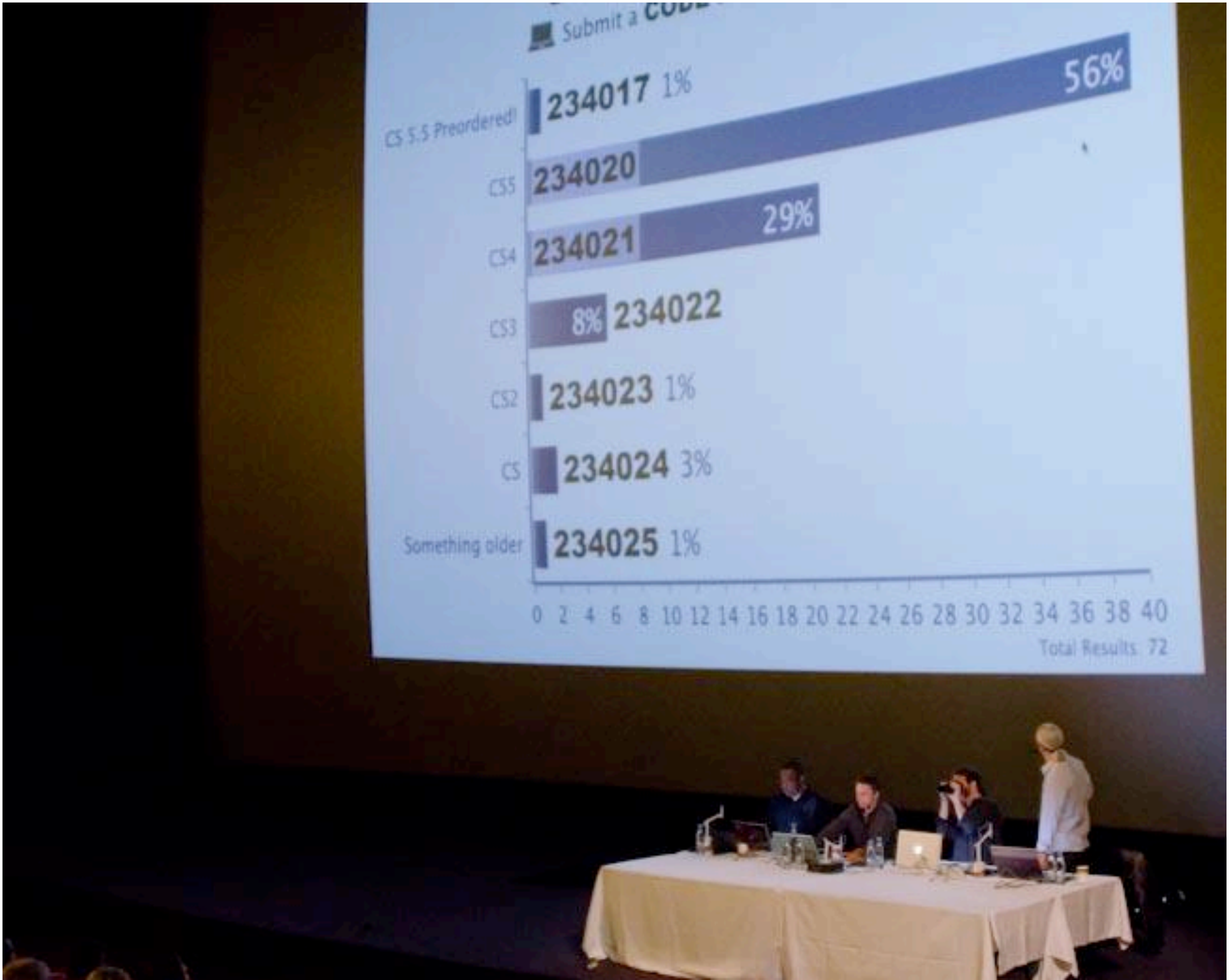
Text a **CODE** to **37607**

Submit a **CODE** to **http://pollev.com**

| | |
|---|---|
| disorder of a system | **281794** |
| reaction that releases heat | |
| reaction that absorbs heat | |
| the total energy of a system | |

powered by **Poll Everywhere**

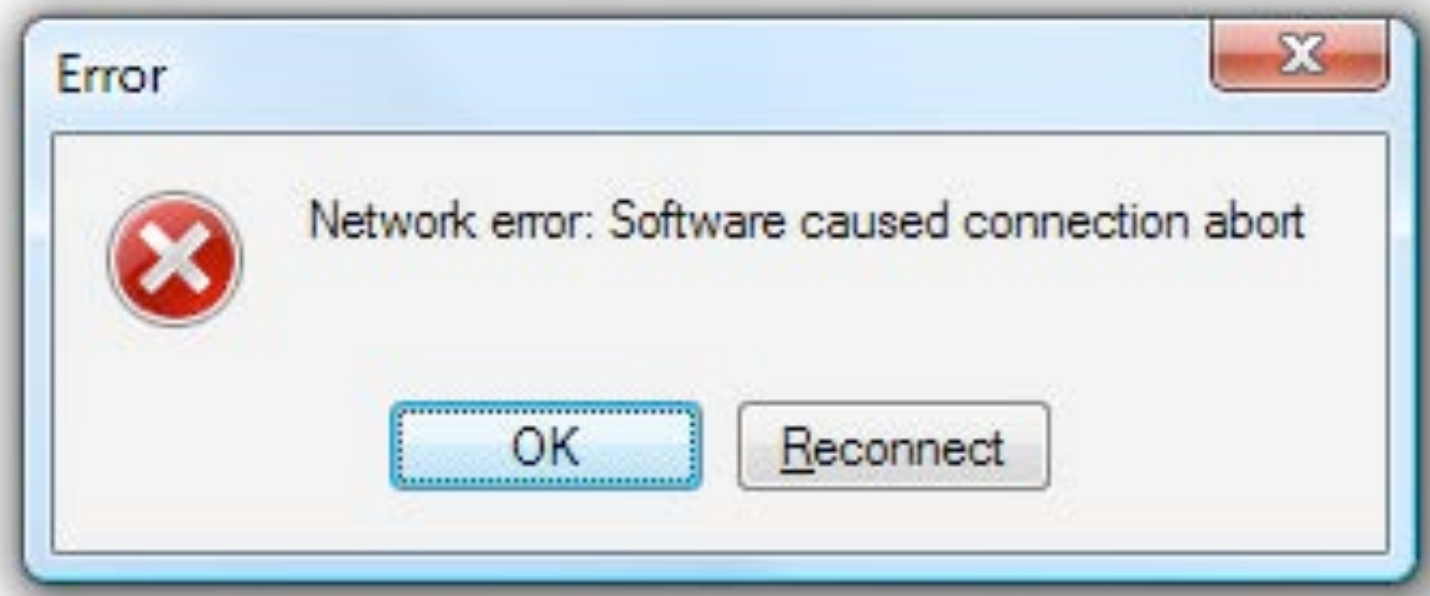

Prezi

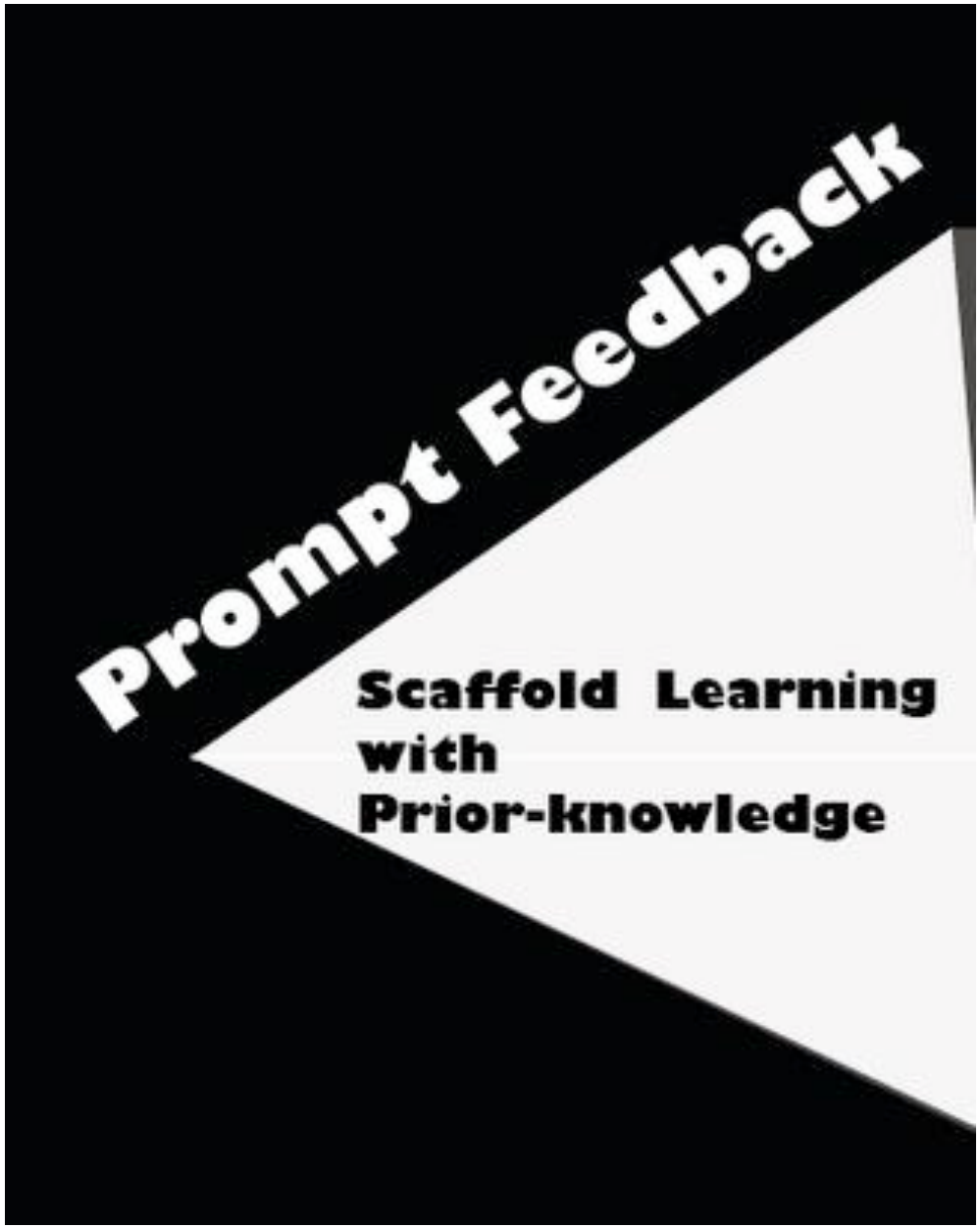

Submit a
CS 5.5 Preordered! 234017 1%
CS5 234020 56%
CS4 234021 29%
CS3 234022 8%
CS2 234023 1%
CS 234024 3%
Something older 234025 1%
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40
Total Results: 72

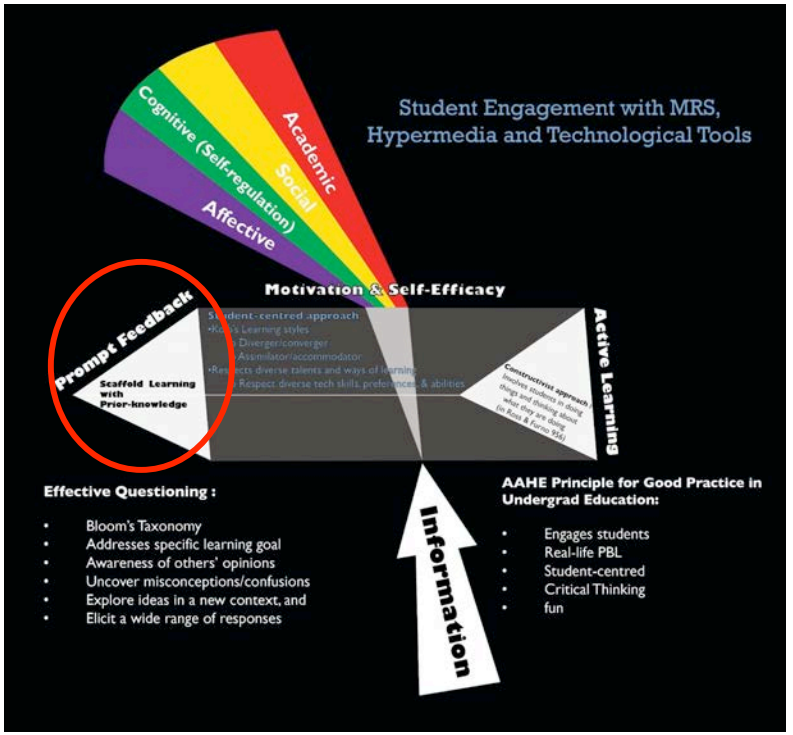

Poll Everywhere in use at the MIT 100K awards


My Responses
URL
What brand of camera do you use?
You can respond 1 time
Canon
Nikon
Other


VROOM
VROOM


Error
Network error: Software caused connection abort
OK
Reconnect




# Mobile ARS in the classroom

# Effective Questioning

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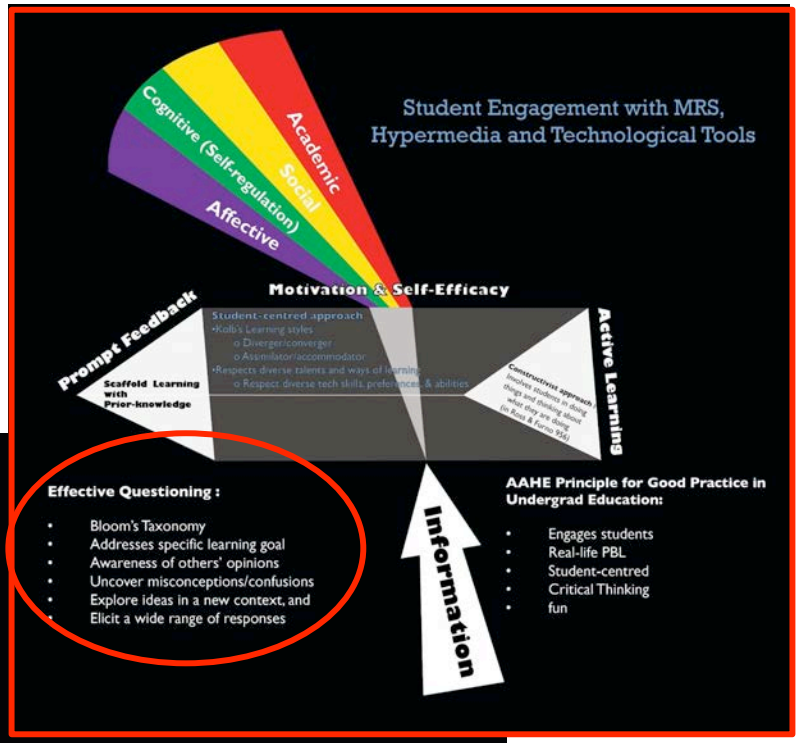
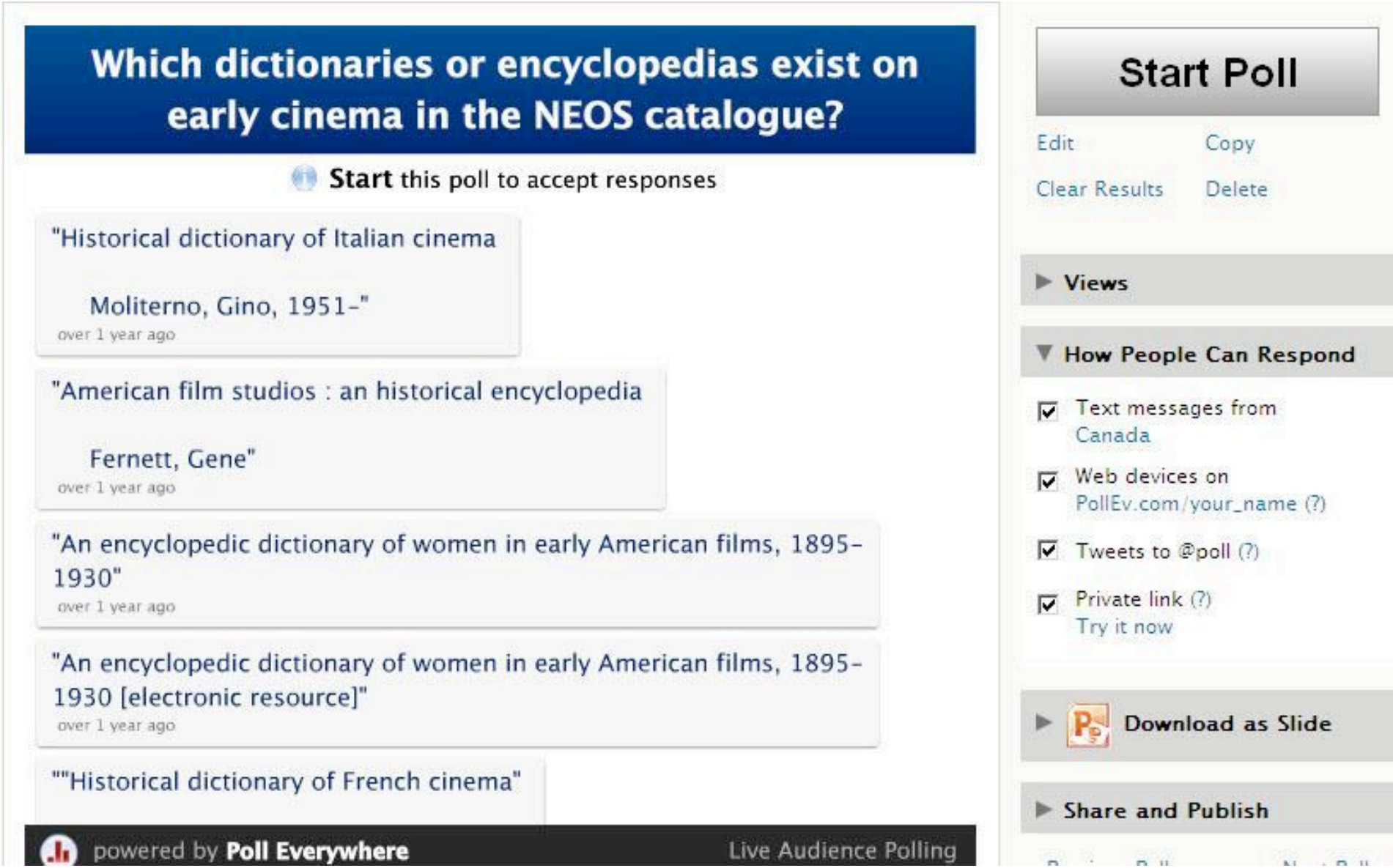
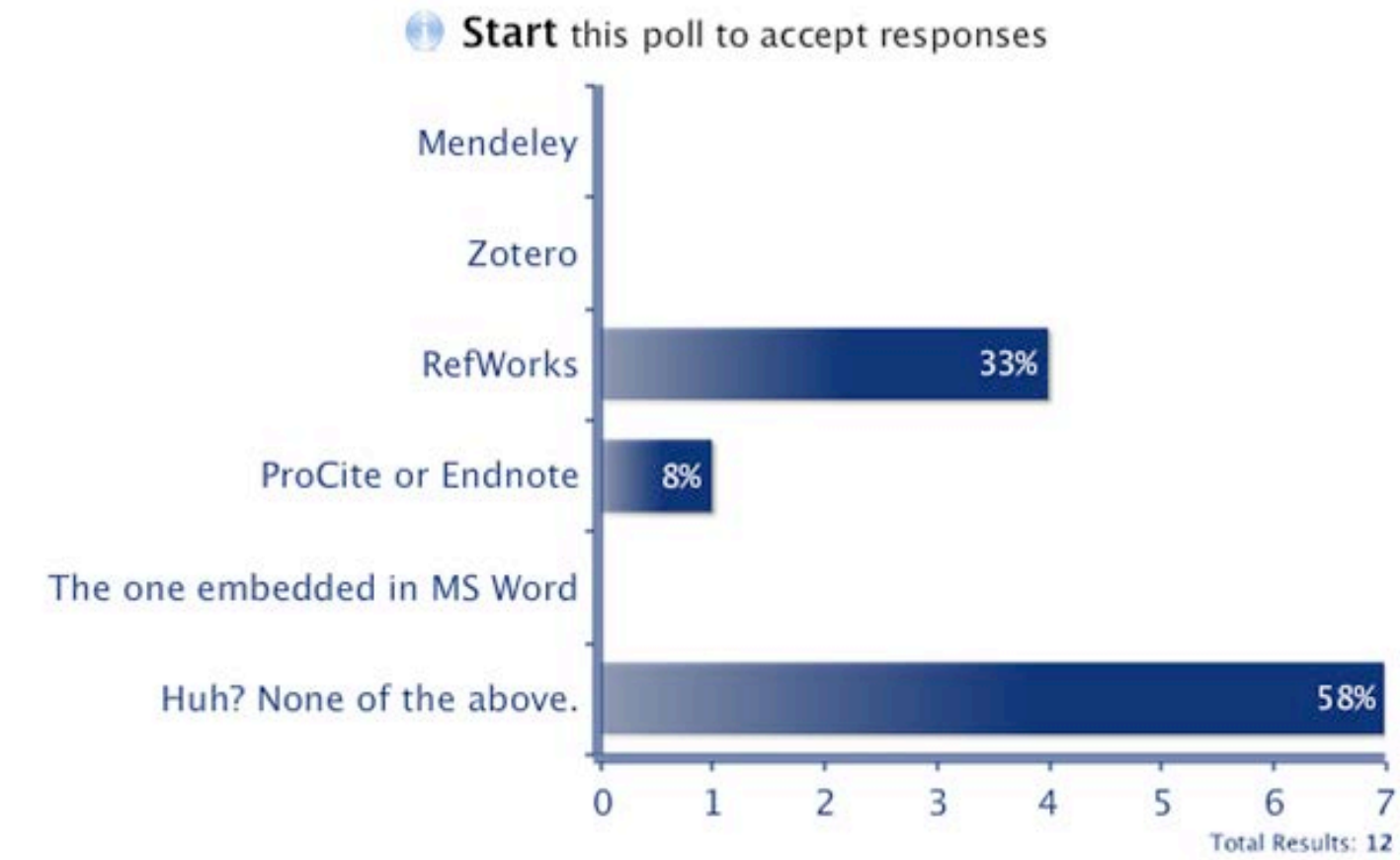


# *Poll Everywhere* Examples



# Which reference/citation manager do you prefer?



# Questions?

**Do you have any questions?**

**What is one thing you will take from this session?**

http://www.polleverywhere.com/free_text_polls/MTg1MjAzNjQxMw

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