Engaging the Hopelessly Distracted: Using Mobile ARS in the Classroom
Practical Uses at the UAL

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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**).
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

Motivation & Self-Efficacy

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

Prompt Feedback

Scaffold Learning with Prior-knowledge

Academic (Self-regulation)

Social

Affective

Growth & Development
Constructivist approach: Involves students in doing things and thinking about what they are doing (in Ross & Furno 956)

AAHE Principle for Good Practice in Undergrad Education:
- Engages students
- Real-life PBL
- Student-centred
- Critical Thinking
- fun
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

- Effective Questioning:
  - Bloom’s Taxonomy
  - Addresses specific learning goals
  - Awareness of others’ opinions
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  - Elicit a wide range of responses

- AAHE Principle for Good Practice in Undergrad Education:
  - Engages students
  - Real-life PBL
  - Student-centered
  - Critical Thinking
  - Fun
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
Technology Ownership

Study of Undergraduate Students and Information Technology, 2011

Results from 3,000 college students from 1,179 colleges and universities

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

<table>
<thead>
<tr>
<th>Technology</th>
<th>Associate's</th>
<th>Doctorate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projector</td>
<td>59%</td>
<td>79%</td>
</tr>
<tr>
<td>Laptop computer</td>
<td>53%</td>
<td>76%</td>
</tr>
<tr>
<td>Wi-Fi</td>
<td>35%</td>
<td>52%</td>
</tr>
<tr>
<td>Student response systems</td>
<td>15%</td>
<td>52%</td>
</tr>
<tr>
<td>Document camera/digital projector</td>
<td>31%</td>
<td>45%</td>
</tr>
<tr>
<td>Thumbdrive/portable hard drive</td>
<td>32%</td>
<td>40%</td>
</tr>
<tr>
<td>Interactive whiteboard</td>
<td>23%</td>
<td>31%</td>
</tr>
</tbody>
</table>

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.
# Variations

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

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

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

disorder of a system

reaction that releases heat

reaction that absorbs heat

the total energy of a system

powered by **Poll Everywhere**
Poll Everywhere in use at the MIT 100K awards
What brand of camera do you use?

You can respond 1 time

- Canon
- Nikon
- Other
Network error: Software caused connection abort
Mobile ARS in the classroom
Effective Questioning

- Bloom’s Taxonomy
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Poll Everywhere Examples

Which dictionaries or encyclopedias exist on early cinema in the NEOS catalogue?

1. Start this poll to accept responses

- "Historical dictionary of Italian cinema
  Moliterno, Gino, 1951-"
  over 1 year ago

- "American film studios : an historical encyclopedia
  Fernet, Gene"
  over 1 year ago

- "An encyclopedic dictionary of women in early American films, 1895-1930"
  over 1 year ago

- "An encyclopedic dictionary of women in early American films, 1895-1930 [electronic resource]"
  over 1 year ago

- "Historical dictionary of French cinema"
Which reference/citation manager do you prefer?

- **Start** this poll to accept responses
- Mendeley
- Zotero
- RefWorks: 33%
- ProCite or Endnote: 8%
- The one embedded in MS Word
- Huh? None of the above: 58%

Total Results: 12
Questions?

Do you have any questions?

What is one thing you will take from this session?

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


