Using Poll Everywhere to enhance the student experience: An institutional perspective

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Poll Everywhere?
Which of the following countries is NOT landlocked?

- Serbia
- Slovenia
- Scotland
- Norway

Where is the heart?

- Heart: located in the thorax, more specifically in the left part of the thoracic cavity, between the lungs.

Which is the name of this audience response system?

- Turning Technologies
- OMBEA
- Socrative
- Top Hat
- Qwizdom
- Optivote
- Poll Everywhere

Results:

- Cambridge: 100%
- Chelmsford: 100%
- Peterborough: 100%
- London: 100%
Pedagogy

- *Peer Instruction: Ten years of experience and results*
  - Crouch & Mazur (2001)

  [Diagram showing various forms of engagement]
  - Student Engagement
    - Cognitive Engagement
      - Peer Relationships
    - Emotional Engagement
      - Relationships with the Faculty Member
    - Behavioral Engagement
  - Campus Engagement
    - Valuing
    - Sense of Belonging
  - Class Engagement
    - Peer Relationships
    - Relationships with the Faculty Member

- Gunuc & Kuzu (2014)
Pedagogy

• Used at the start of a class to select a topic for detailed coverage

• "Marking" is fully automatic
• Students know immediately if they gave the right or wrong answer
• Students know how their performance compares to the group as a whole
• Academic sees immediately how well the class measures up on that question
• Academics can give tailored explanation focusing on wrong answers

• Formative feedback to the academic on their teaching – immediate adjustment rather than next semester

Draper et al (2002)
Institutional Background

• Use of clicker based ARS in Science & Technology
  • Students would lose clicker
  • Cost implications (replacement / batteries)
  • Administration of clickers challenging at scale
  • Decline in use as a result

• Needed an alternative solution!
• Research identified average 1.3 devices connecting to network
• SEM 1 2013 - two faculties started limited use (FST & LAIBS)
• Usage quickly exceeded expectations (and early licence commitments) - Expanded to more staff the following year
Devices used by students

- Smartphone: 76%
- Tablet: 16%
- Laptop: 4%
- Text: 4%
- Twitter: 4%
Better understand subject matter?

- Yes: 56%
- No: 4%
- Somewhat: 40%
Faculty Pilot Evaluation Comments

• Students

“*If you're not so confident it’s a great way to get across your point or any questions*”

“Engages students in learning”

“Very fast group participation in answering questions”

• Staff

“*It gives a voice to people who wouldn’t ask a question. It allows people to give the answer they think it is rather than the one that has the most hands in the air. It has also helped create something that can seem like a 1:1 conversation with 200 people*”
University Wide Pilot

• July 2015 opened university wide account @ 5,000 students
• Available to all faculties / services
• Poll Everywhere Institutional User Group
• Super User Training / Webinar Training

• Evaluation carried out June 2016
Active Staff Users

- LAIBS: 30
- FST: 80
- FMS
- FHSCE
- ALT
- ALSS

Student Services
Staff: How did you use Poll Everywhere?

- Tests
- Mid Semester Questionnaire
- Tackling disruptive behaviour
- Induction/Welcome
- Blog post for TEL-ve Days of Christmas event
- External Meetings
Staff: How did you use Poll Everywhere?
Pilot Evaluation: User Experience

- 3,600 unique student participants by June 2016
  - 1,954 registered participants and PE calculation based on devices (@1.5)
- 182 active staff users

- Survey Monkey used to gather data
- 82 student respondents
- 114 staff respondents
Students: Method of Response

Actual and Preferred Method of Response

<table>
<thead>
<tr>
<th>Method Used</th>
<th>Preferred Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Browser on Mobile Device</td>
<td>Browser on Mobile Device</td>
</tr>
<tr>
<td>App on Mobile Device</td>
<td>Twitter</td>
</tr>
</tbody>
</table>

% Percentage

Text/SMS
Browser on PC
Browser on Mobile Device
App on Mobile Device
Twitter
Students: Satisfaction

- 88.2% rated PE as Excellent or Good
- 79.4% Definitely Recommend or Recommend PE to another student
- 82.4% added to their University Experience

“Enjoyed the interactive nature of the sessions”
“It was a good anonymous way of expressing opinion”
“It allows almost immediate feedback in sessions when assessing prior knowledge”
Students: Participation and Learning

- 70.6% indicated their participation increased through the use of PE
- 67.7% felt PE helped them to progress and learn

"Generates much more focus, you want to get it right so you concentrate more on the lecture."

"It helped me to think about what I had learned, and to realise what areas I was not as confident with, and needed to study more on."

[Diagram showing participation and learning responses]
Staff: Satisfaction

- 95.3% reported an overwhelmingly positive attitude towards PE
- 72.7% found PE Easy or Very Easy to use
- 90.6% recommend PE to a colleague
Staff: Participation and Learning

• 82% student participation Greater or Much Greater with PE
• 76.7% felt that PE helped students to learn
• 58.5% PE significantly helped student progression and attainment. 32% saw moderate change

“Students initially say they have no questions or comments, then I put PollEv up and the questions flood in”
Use Poll Everywhere More?

Students

Staff
What needs to be different?

• Students

“Cancel voting after the right answer is revealed; it is sad and rather annoying to watch the numbers miraculously shuffle right after the right answer has been highlighted”

“I am not sure you can change the fact that some people abuse it and post inappropriate comments”

• Staff

“I need more practice to feel confident about using it!”

“It’s been good, but can also be tricky when allowing open comments – students do not always know how to behave properly”
Outcome and Next Steps

• Increased licence from 5,000 to 15,000 students (July 2016→)
• Promoting usage with faculties and central services
  • Learning and Teaching
  • Participation and Engagement

• Registration of all students (licence & results)
  • Complicated as we have existing ‘self-registered’ – multiple accounts
• Integration with new LMS (Canvas)
Where are we now?

**Account: Anglia Ruskin University**

Report generated at: May 10, 2017, 05:40 PM

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
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<tbody>
<tr>
<td>1. Total subusers on the account</td>
<td>350</td>
</tr>
<tr>
<td>2. Subusers who authenticated during the last 365 days</td>
<td>225</td>
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<tr>
<td>3. Total number of polls from all users on the account</td>
<td>10,342</td>
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<tr>
<td>4. Total responses since the account was created</td>
<td>421,786</td>
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<tr>
<td>5. Registered participants on the account</td>
<td>2,752</td>
</tr>
<tr>
<td>6. Devices responding in the last 365 days</td>
<td>15,726</td>
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</table>

- **421,786**
- **15,726**
- **10,484**
Active Staff Users

- Student Services
- Library
- LAIBS
- FST
- FMS
- FHSCE
- ALT
- ALSS
Which of the following statements best describe arteries?

**Poll locked. Responses not accepted.**

- All arteries carry oxygenated blood towards the heart.
- All arteries contain valves to prevent the back-flow of blood.
- All arteries carry blood away from the heart.
- Only large arteries are lined with endothelium.

Resources - what have you used so far?

- Library Search: 143
- Google Scholar: 335
- Google Scholar Advanced Search: 133
- ProQuest Sci & Tech Collection: 75
- Something not listed here: 210

Total Responses: 954
Types of Use: Student Facing

• Knowledge checking to guide lecture content
• Topic selection – vote for session focus
• Open questions for students to engage in critical discussions
• Triggers for student engagement - particularly sensitive subjects
• Flipped Learning / Team Based Learning (iRATs etc)
• Survey ‘Homework’
• Peer assessment of presentations
• Engagement credit (registered)
• Open Days / Welcome Weeks
• Question of the week...
Impact: NSS

Assessment and Feedback & Overall

<table>
<thead>
<tr>
<th>Year</th>
<th>Assessment and Feedback</th>
<th>Overall</th>
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<tbody>
<tr>
<td>2012</td>
<td>77</td>
<td>79</td>
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<tr>
<td>2013</td>
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<tr>
<td>2016</td>
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</tbody>
</table>
Impact: NSS

Feedback has been prompt

- 2012: 71%
- 2013: 70%
- 2014: 77%
- 2015: 78%
- 2016: 79%

I have received detailed comments

- 2012: 73%
- 2013: 72%
- 2014: 76%
- 2015: 77%
- 2016: 80%

Feedback helped me clarify things

- 2012: 64%
- 2013: 63%
- 2014: 69%
- 2015: 70%
- 2016: 74%
Give it a go...

pollev.com/trueman
References

