**Mobile Response Systems: A Fast and Easy Interactive Tool**

Have you ever found yourself in a situation where you ask an audience a question and there is silence in response? Or have you tried surveying a room of 300 within minutes but didn’t have the means? We have been there before and, looking for a solution, have discovered a Mobile Response System (MRS), which is similar to what is used on popular TV shows to collect votes. MRS is an interactive tool that gathers questions and feedback from audiences in real-time via text messaging, Twitter, or on the web. Other terminology referring to the same technology includes Audience Response System(ARS), Classroom Response System (CRS), Student Response System (SRS), etc. With the growing development and proliferation of mobile technology, low-cost, flexible, and easy-to-use MRS is gaining popularity and has the potential to become mainstream in the near future. All types of libraries can use MRS in any environment, whether in a meeting, at a conference presentation, or in a classroom, to collect feedback, take anonymous polls, track attendance, or brainstorm. Not every MRS is available in Canada or offers the full-package (e.g. SMS and Twitter capabilities, and embedding into a PowerPoint or Prezi presentation). **See chart 1**. Many North American universities have started to use MRS for educational purposes, and in particular Poll Everywhere (www.PollEverywhere.com). We at the University of Alberta have also chosen to use Poll Everywhere for its clear technological and pedagogical benefits.

**So What’s Involved?**
Using Poll Everywhere is easy for both creators and users. Set up time takes less than 30 seconds, and afterwards the data analysis is just as quick. Poll Everywhere is free for the first 40 respondents, but there are pricing packages for individuals and for institutions that allow for a greater number of participants, tracking of  individual responses, detailed reports, or the customization of polls with unique names. All that an audience needs to participate in a MRS poll is a mobile device (i.e. cell phone, smartphone, tablet, laptop, computer, etc.) that has browser and Wi-Fi access or SMS/texting capabilities.  Poll Everywhere has a choice of three polls: 1. Multiple Choice, 2. Open Ended, and 3. Goal Polls. Respondents choose from a list of answers for multiple choice polls, or submit free text responses in open ended polls. A variety of questions are therefore possible, for example, “What is the best book of the year?” and “Where do you look for information?” or “Name two things you will remember from the presentation”. Finally, goal polls enable tracking progress of group goals such as donations and pledges.

After choosing the poll type and the participation method, the instructor can select a few settings such as how many times people can respond to the poll and in which way they can submit their answers. And now the poll is ready to go live. Participants will then respond using their mobile devices or a computer via text messaging, web voting or Twitter. Since their responses rely on Wi-Fi or SMS/texting, there are no long distance charges or hidden charges to the user. **[Insert Figure 1]** Poll results can be viewed instantly through the web or embedded in a PowerPoint/Prezi presentation. There is no lag time, and the results dynamically appear on the screen as they come in, which has often in our case produced an “ooh” effect on participants.

As always, test the polls prior to taking them live, especially if you are embedding them within PowerPoint or Prezi. The computer must have Wi-Fi access to display responses. If you are using PowerPoint, make sure to have macros turned on, and for Prezi, ensure that the latest Flash plugin has been updated.

**Case Example: Poll Everywhere at the University of Alberta**
Two years ago, a few librarians at the University of Alberta, decided to adopt Poll Everywhere to engage students in an active classroom instruction. In comparison with the campus-wide clicker technology, we found that Poll Everywhere was instructor and user-friendly, cost- and time-effective, and portable. No extra accessories were required besides students’ own mobile or computer devices, which they usually carry. It also allowed for open-ended answers, something that clicker devices cannot do. **[Insert Figure 2]** Our primary objectives in using MRS were to check students’ prior knowledge and course material understanding, to collect feedback, and to reinforce learning. In a classroom setting from 10 to 200 students at the University of Alberta, Poll Everywhere has fostered peer learning, student involvement, and active participation. Instructors also benefited from the ability to customize their teaching on-the-fly based on students’ live responses and to assess students’ answers after class. Overall, the hands-on aspect appealed to different learning styles and personalities. The non-threatening and anonymous form of assessment created the learning environment that contributed to student motivation while instilling a healthy dose of competition without the threat of losing face. We found that presenting answers even anonymously on the screen empowered students  and gave them time to process diverse ideas and perspectives submitted by their peers.

**Broader Applications**
Literature reviews reveal that school and academic libraries in North America have been experimenting with MRS for the past few years. However, it has the potential to be used on a much larger scale beyond instructional settings. Here are some ideas for its broader application:

·         Audience choice awards, battle of the bands, or talent shows
·         Paper-less and hassle-free surveys at conferences, town hall meetings, and                         presentations
·         Library Orientations
·         Text feedback to a presenter
·         Votes from 1000+ people
·         Market research
·         Silent SMS auctions
·         Training comprehension checks
·         Outdoor SMS voting
·         Elections

Non-instructional library settings such as advertising and government agencies, non-profit organizations, and corporations like Google, McDonalds, and Oracle have used Poll Everywhere. The popularity of MRS is on the rise thanks to the increasingly mainstream cloud movement, which is attracting major corporations and educational institutions, because of its ubiquitous, interoperable, and immediate characteristics.

Some institutions have leveraged on cloud technologies by incorporating them into their classroom. For example, they use Google Apps to solicit feedback from an audience either through Google Docs, Google Moderator, or Google Form. While Google tools and other cloud applications could be useful to interact with students, MRS has an advantage of providing instant collective feedback and a variety of polling methods. Libraries would benefit from adopting innovative technologies to connect with their users; however, MRS is a means, not an end. Use it as a tool to engage, interact, and WIN over your audience.

**References**

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**Chart 1**

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| **Name** | **Cost** | **Web/App/ SMS** | **Question Type** | **PPT/ Twitter/ Prezi** | **Max. Resp.** | **Analytics** | **Comments** |
| [**eClicker Host**](http://www.eclicker.com/) | 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**](http://www.polleverywhere.com/) | Free up to 40 Resp. | Web,SMS | MC, TF, OE | All | Based on subscription | Only for paid subscription | Turn on PowerPoint Macros |
| [**mClk**](http://www.mclkonline.com/) | $35+ /month | SMS | MC, TF, OE | PPT only | Based on subscription | No | Only SMS |
| [**Web Clicker**](http://www.iclicker.com/Products/webclicker) **(iClicker)** | Resp.: $10/180 daysP: license | App | MC, TF | No | Based on subscription | Yes | \* See notes below. |
| [**SMART Response VE**](http://tinyurl.com/3rzugrw)  | Contact reseller | Web only  | MC, TF | No | Based on subscription | Yes | \*\* See notes below. |
| [**Mentimeter**](http://mentimeter.com/) | Free | Web only | MC, TF | No | Unlimited | No | No login, fast, quick & easy |
| [**Socrative**](http://m.socrative.com/) | Free | Web only | MC, TF, OE | No | Unlimited | No | Open source, multiple polls |

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| **Abbreviations**: **App** - software made for mobile devices, **iOS** - Apple mobile device operating system, **MC** - multiple choice, **OE** - open ended, **P** - presenter. **PPT** - Microsoft PowerPoint, **Resp.** - respondents, **SMS** - Short Message Service, **TF** - true or false |

**Notes:**
***\* Web Clicker****: can use either mobile device with Web Clicker application or iClicker (both cost money). Using either will also require instructors to have the iClicker Hub/Software. Displaying audience responses could take up to 10 seconds.*
***\*\* SMART Response VE:*** *is SMART Board compatible; requires SMART Notebook Software*