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Technology Left Behind -- Clicking Towards Information Literacy

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Hyde Park Corner Sound-off — Presented by **Chuck Hamaker**, Moderator (UNC-Charlotte) and **Katina Strauch**, Moderator (College of Charleston)

Reported by: **Ramune K. Kubilius** (Northwestern University, Galter Health Sciences Library) <r-kubilius@northwestern.edu>

Were you curious about early echoes from the **2007 conference**? What first-timers thought? What suggestions were conveyed to plan the **2008 conference**? This “post-mortem” was the session to attend, and each participant had a chance to speak. A *Library Journal* reporter in attendance mentioned 2007 common themes: eBooks, data and data sets. Also: Tension of open access information and watered down quality; the dearth of good data (statistics) on which to base decisions; the organization and re-organization taking place in libraries as streamlining puts people out of jobs. **Strauch** mentioned concerns with archival preservation and authentication.

Hamaker mentioned purchases made now on faith, but that later have a cloud of uncertainty. **Suggestions:** Ensure Q&A time in sessions. Restrict the number of panelists. Social interactions: emphasize true *Lively Lunches*; incorporate ACRL-like topical dine-arounds. Start Wednesday and discontinue Saturday programming. Have theme tracts, e.g., eBooks. **Topics of interest for 2008:** More discussion on text and data mining; how to predict what’s popular; feasibility inquiry; authors’ rights & DRM & copyright — maybe a publishers’ panel; how libraries can avoid extinction; the China phenomenon (mentioned in several 2007 sessions); sessions for small college libraries (or public libraries or special libraries). **General comments:** “This conference has a wonderful soul about it and there was a welcoming feeling from old-timers” (first-timer). The conference was a bit intimidating, but the environment and topics were good (library school student). I feel like a “rare bird”, but the issues are the same (a special librarian). The award for furthest point of origin (thereby the most expensive plane tickets)? Hong Kong. **Nice problem to have?** So many sessions, too much from which to choose. 🐦

This concludes the reports we received from the 2007 Charleston Conference. For information about the 2008 Charleston Conference visit the Charleston Conference Website at www.katina.info/conference.

Technology Left Behind — Clicking Towards Information Literacy

Column Editor: **Cris Ferguson** (Electronic Resources/Serials Librarian, James B. Duke Library, Furman University, 3300 Poinsett Highway, Greenville, SC 29613; Phone: 864-294-2713) <cris.ferguson@furman.edu>

One of the challenges of information fluency instruction is how to engage students in the instruction session and to cultivate their interest in the materials being covered. This is particularly difficult in an academic library setting, where librarians may encounter a student only once a semester, if that often. One potential solution with which a number of academic libraries are experimenting is audience response systems.

What is An Audience Response System?

An **Audience Response System (ARS)** allows individual members of a class to respond to multiple-choice questions projected on a screen through the use of handheld remote control devices. (**Bombaro**, 298) While it goes by many names, Audience Response System, Personal Response System (PRS), Classroom Response System, and Electronic Voting System to name a few, this relatively new technology is more commonly known as *clickers*.

Caldwell likens the use of clickers to “the ‘Ask the Audience’ portion of the game show ‘Who Wants to be a Millionaire.’” (9) By selecting a number/letter on their clickers, all audience members are able to participate in the game show, offering their own answers to questions. Outside of academia, an ARS system was used “by network television news programs during the 2004 United States Presidential Debates, which measure[d] the real-time reactions of studio-audience members as they listened to the candidates’ arguments.” (**Hoffman and Goodwin**, 423)

The clickers work much the same way in a classroom setting. Clickers enable “instructors to instantaneously collect student responses to a posted question, generally multiple choice. The answers are immediately tallied and displayed on a classroom projection screen where both students and instructor can see and discuss them.” (**Caldwell**, 9) It has been found that clickers

encourage participation by ensuring anonymity, and the instructor can tailor a lesson to make sure that a particular concept is comprehended, if it is clear that, on the basis of the responses, the students have failed to grasp the concept being discussed. (**Hintz**, 38)

How Do Clickers Work?

A clicker system is comprised of three basic components:

1. the receiver, which attaches to the instructor’s computer
2. the clickers, and
3. the accompanying software program which is loaded on the instructor’s computer. (**Hoffman and Goodwin**, 425)

The clickers themselves are essentially wireless keypads, similar in appearance to television remote controls. (**Hoffman and Goodwin**, 425) The clicker software typically integrates with **Microsoft PowerPoint**, and, in some cases, other **Microsoft** programs, such as **Excel**. Data is transmitted from the clickers to the software by way of the receiver.

Instructors pose a question on a slide as part of **PowerPoint** presentation, offering multiple-choice or true / false answers. Students select their answer, using the keypad on the clickers. The receiver on the instructor’s computer collects the student responses, tabulates their answers, and makes the results immediately available as a graph or chart.

Clickers in Libraries

Applications of clickers within a library setting are only just beginning to be explored, primarily in the area of library instruction. **Dickinson College**, **Furman University**, **Texas A&M University**, and **Brigham Young University** have all recently introduced clickers in their library instruction sessions with some degree of success.

Dickinson College

In the fall of 2006, **Dickinson College** began incorporating clickers into its “**The Seven Deadly Sins of Plagiarism**” program, an information fluency initiative designed to prevent and promote awareness about plagiarism.

During the presentations, students were presented with statements regarding plagiarism and invited to vote as to whether the statements were true or false. For example, one statement students were asked to vote on was: *Copying something from the Internet without citing is not plagiarism.* (**Bombaro**, 305) According to the data **Dickinson** collected, 92.80 percent of the students knew the correct answer was false. This type of feedback can help librarians determine student levels of comprehension and identify areas where further explanation is required. (The complete **Seven Deadly Sins PowerPoint Presentation** can be found at: <http://lis.dickinson.edu/Library/FacultyServices/FYSeminars/fysemfiles/7SinsofPlagiarism%20FINAL%202007.ppt>)

The data collected from the “**Seven Deadly Sins**” presentations indicated that the sessions were both effective and informative. Students at **Dickinson** responded to the use of the clickers enthusiastically, commenting on the fact that the clickers were both fun to use and helped them stay focused on the plagiarism lesson. (**Bombaro**, 307) By using the clicker system the librarians at **Dickinson** were able to gauge how effective the presentation was and determine ways to improve the presentation for future sessions.

Furman University

The **Furman University Libraries** have utilized clicker technology when training students that work at the library’s Research Assistance desk providing reference services. After some initial training on library services and resources, the student workers are quizzed using the click-

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ers. They are presented with theoretical reference questions and several options for answering the reference question. Students are asked to select the best option for addressing the reference question using the clicker. If the students select different resources / options they are invited to discuss their various approaches and the merits of each approach.

The clickers "add a dimension of interactivity to class that makes things a little more interesting. Especially working with a group you don't know, the clickers help get discussion going. A student who might not raise his/her hand to answer a question will gladly 'click,'" says **Libby Young**, Government Documents/Reference Librarian at **Furman**. **Young** emphasizes that clickers are not appropriate for every circumstance. "You just don't want to overuse them to the point they drag down the presentation," she says.

Texas A&M University (TAMU)

Texas A&M University Library has experimented with the use of clickers in three different types of instruction sessions: faculty and staff training instruction, instruction during Academic Integrity Seminars, and instruction for English Composition classes.

While clicker systems allow instructors to track individual responses and comprehension, at **TAMU** "the sessions were designed to keep student responses completely anonymous in order to encourage maximum participation." (**Hoffman** and **Goodwin**, 430)

Hoffman and **Goodwin** observed several benefits of the use of clicker technology. They found that the clickers served as 'an ice breaker' in instruction sessions. "Before the first clicker question was even asked, students were engaged and curious about the clickers and what the instructors were about to teach." (430) It was also determined that the clickers helped to keep students focused, increase participation, promote discussion, and increase retention. (**Hoffman** and **Goodman**, 430)

Brigham Young University (BYU)

Librarians at **Brigham Young University** play an active role in preparing students for a research project as part of a required First-Year writing course. Students attend two library instruction sessions, "which are weighted toward demonstration and hands-on practice." (**Julian** and **Benson**, 258) Beginning in the fall of 2006, library instructors began using clickers during these information fluency sessions. "Because they spend considerable time watching demonstrations, some students lose focus during the session and miss important information. Clickers seem to increase attention through active participation and provide valuable feedback in the session." (**Julian** and **Benson**, 258)

Using the data from the instruction sessions where the clickers were used, **BYU** identified three advantages the clickers offered: instantaneous assessment of student progress (how far along students are on a particular assignment), assessment of learning comprehension throughout the instruction session, and students' opinions of their own learning comprehension. (**Julian** and **Benson**, 259)

Julian and **Benson** offer this advice when implementing clickers into information fluency

instruction: "Carefully worded questions that fit the context of the instruction provide the best experience for students and the most valuable data for teachers." (260) [For further information on best practices when incorporating clickers into the classroom, see the articles by both **Caldwell** and **Martyn**.]

What Do Clickers Cost?

There are several audience response systems available on the market. **Turning Technologies** (<http://www.turningtechnologies.com>) offers **TurningPoint**, which can be configured for a variety of settings: higher education, K-12, or corporate applications. According to the Tech-Knowledge section in the August 2006 issue of *School Library Journal*, a 32-seat student response system from **Turning Technologies** runs \$1,483. (**Staino**, 25) **Dickinson College** reported paying \$2800 for its **TurningPoint** system. (**Bombaro**, 298)

Texas A&M University (TAMU) Libraries selected the **InterWrite PRS** system (<http://www.interwritelearning.com/>) from **GTCO Calcomp**, which is also used at the **University of Nebraska**. "Given a small budget, it seemed to be a cost-effective, bare-bones system that also offered several special features relevant to **TAMU Library** needs: it can create questions 'on-the-fly' and has interoperability with **WebCT**, **Microsoft PowerPoint**, and **Microsoft Excel**." (**Hoffman** and **Goodwin**, 427-428)

Ultimately the price for any **ARS** will vary based upon the application of the system (academic, K-12, public library, etc.), the number of clickers purchased, and the features the organization desires.

When used effectively, **Audience Response Systems** have the ability to engage students actively in library instruction sessions. They foster anonymity, garnering responses from students that might not otherwise participate, and providing a "safe" way for students to respond when dealing with touchy issues, such as academic integrity. At a price between \$2000 and \$3000 for an **ARS** installation, the cost of the clickers is not terribly expensive. In the same neighborhood as an electronic reference resource, it is an expense well worth the end results: active user engagement and positive publicity for the library.

Rumors from page 61

Speaking of **Dr. Brucoli**, **Joel Swerdlow** wrote to obtain a PDF copy of the essay "The End of Books and the Death of Libraries" (*ATG*, v. 19#1, Feb 2007) with his students at the **U. of Texas in Washington, DC** this fall.

And, speaking of PDFs, **Felicia M. Cleburn**, <FCLEBURN@mail.twu.edu> who works for **Texas Woman's University** as a library assistant in **Electronic Resources** participated in an online class in August called **Fundamentals of Electronic Resources Acquisitions**, sponsored by the **American Library Association**. Turns out the course reading list included an article from *ATG*—"Biz of Acq—A Database By Any Other Name" (*ATG*, v.14#2, April, 2002). And **Felicia's** was just one of many requests that *ATG* received for the article! **Sue Wiegand**, the author, gave us permission to post this online so it is now available

Coutts congratulates Michelle Emanuel!

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for all to see on the *ATG News Channel*! Thanks to **Sue** and to **Felicia**. And, let us know if there is a specific article that you would like to see online and we will do our best to comply.
www.against-the-grain.com

And, last but not least, if you have time (Friday 2:15-3:00), please stop by for a discussion of **The Charleston Conference Observatory – A Proposal** by **David Nicholas (UCL)**. Currently there is no mechanism by which the exciting ideas and challenges raised can be tested or researched further and the results reported back to the **Charleston Conference** to ensure or build continuity and dialogue. **The Charleston Observatory** will provide a mechanism by which this can be done. **The Observatory** will be the research adjunct for the **Conference**, the medium by which the ideas generated are turned into robust research projects, which provide the evidence base for strategic planning. **The Observatory** will be a place where information experiments can be undertaken

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