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Clickin' in the Honors Classroom: Using Audience Response Systems to Facilitate Discussion and Decision-Making

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In his 1988 book entitled *The Media Lab: Inventing the Future at MIT*, Stewart Brand makes the following observation: “Once a new technology rolls over you, if you’re not part of the steamroller, you’re part of the road” (9). One focus of this Forum on “Honors in the Digital Age” is the degree to which honors faculty and students are part of the steamroller or part of the road. Instructional technologies can be both boon and bane, and I will address both aspects of using “clickers” in the honors classroom. “Clickers” is the common or slang term for what is more formally known as interactive, computer-based Audience Response Systems (ARS) or Group Response Systems (GRS), which allow members of an audience/group (e.g., classroom learners) to respond to questions posed to them by “clicking” their preferred answer out on a hand-held device or response pad. Those posing the questions (e.g., teachers or discussion facilitators) can, within seconds, prompt the system to tally, summarize, and display results in a chart form (e.g., pie, bar, or graph) for all to view and consider.

Given a particular instructional technology, perhaps one factor that contributes to the user’s becoming part of the steamroller rather than the road is thoughtful, appropriate application of the technology for the context in which it is being used. The honors context for which I have found clickers most appropriate is a seminar course where issues are analyzed, viewpoints are fleshed out and compared, and ideas are exchanged. Levels of faculty-student and student-student interactivity and engagement in seminars should be high. Often, however, when the issues are controversial, the discussion can be overly value- and attitude-laden. Most honors students are no different than non-honors students in being hesitant, at least initially, to speak up in class. “While curious about the beliefs and practices of their peers, some students

resist sharing insights about their own due to concerns about how their peers will react to such revelations. Lack of knowledge or experience, as well as feelings of fear, shame, embarrassment, or anger, often underlie such resistance” (Gentry, 43, in reference to Ramos & Blinn-Pike). When I use audience response systems to pose questions to my students that inquire about values, attitudes, beliefs, and behavioral tendencies, their ability to maintain anonymity when answering is helpful in reducing passivity and generating higher levels of interactive discussion in reaction to the poll results.

Like many forms of technology, ARS has changed considerably since it was first conceived and used for military training contexts in the 1950s (Horowitz). Instead of requiring wires and cables, modern applications for educational and other settings are wireless. The size of response pads has shrunk, as has cost. Today’s “clickers” or “zappers,” each with a unique registration number, are the size of a small hand-held calculator or a credit card and cost between \$30 (used) and \$70 (new) each. With proper treatment and care, such as replacing batteries from time to time, clickers can be used repeatedly. ARS-specific software is typically free, easy to install on a computer, and well integrated with other software programs such as Microsoft’s PowerPoint. For an additional \$100, an instructor, presenter, or meeting facilitator must also acquire a radio frequency receiver, which looks similar to a jump drive or memory stick and plugs into a computer’s USB port; it captures responses made by audience members on their keypads and transfers them to the ARS software program in the computer for analysis and eventual reporting.

When teaching an honors seminar course, I combine the use of clickers with various teaching-learning strategies or methods such as case studies, cooperative group problem-solving exercises, “think-pair-share” activities sprinkled throughout brief lecture-type presentations, or simulations. For example, students work in small groups to research a societal issue such as those found embedded within the current Phi Theta Kappa seminar, “The Paradox of Affluence: Choices, Challenges, and Consequences” (see <<http://www.ptk.org/honors/seminars>>). Next, students plan and moderate a simulated town hall forum related to the selected issue, thus practicing public deliberation skills (see Matthews & McAfee). They present trends and facts associated with the issue at hand and guide the audience (their fellow students and invited guests) through a process of analyzing the issue and assessing the suitability of various solutions or courses of action. With my guidance during their planning of the forum, the students formulate a series of questions to be posed in clicker fashion to the audience at the beginning and close of the forum. An optimal set of questions will vary in nature or type (e.g., knowledge-based; attitude- or belief-oriented; reporting behaviors or experiences; soliciting preferences). During the debriefing after the simulated forum, when

students compare pre-forum and post-forum polling results that have been tabulated and graphed by the ARS, they come to realize how powerful a balanced, holistic forum can be in presenting new information, dispelling myths and misconceptions, changing attitudes and opinions, and inspiring a willingness to take action.

While I have not used clickers as a means of administering quizzes or tests, I have used them to pose questions that help me assess the degree to which students have attended to assigned readings prior to class. I have also used them to pose questions at the close of a lesson to help me determine what aspects remain muddy in their thinking on a topic and could benefit from further clarification or study. On occasion, when class members need to arrive at a consensus on a matter (e.g., which community organization to volunteer service for, which cultural event to attend together, or which community expert to invite to speak to the class), polling with clickers provides anonymity and efficiency. Though some instructors employ clickers for taking attendance, I have never opted to do so.

Positive outcomes for students and teachers occur when polling practices are neither under- nor over-utilized. Students are resentful of purchasing clickers they seldom put into action, and their interest wanes when confronted with too many questions in too many polls, particularly ones that provoke little thought or curiosity. Positive results are also more likely to occur for students and teachers when both parties appreciate and accommodate the learning curve that accompanies the use of an unfamiliar instructional technology. System and software failures happen from time to time. Clickers can be damaged, forgotten, or lost. And, when clickers are used for purposes of administering tests and taking attendance, cheating abuses can surface, particularly when audience sizes are large. These challenges can be minimized with forethought about remedies (e.g., stated expectations, policies, procedures).

If the ARS “steamroller” has made its way to your campus and academic unit, you may be wondering whether you and your students will become a part of the movement or the pavement. Just as other instructional technologies have been unable to cure all teaching-learning ills, clickers and zappers offer no panacea either. Nonetheless, education-based research studies increasingly demonstrate beneficial outcomes (Abrahamson; Judson & Sawada). These benefits include increased levels of audience interest, engagement, interactivity, and understanding of concepts covered, all of which are central to honors contexts. As for teachers/presenters, findings point to their increased ability to recognize in a timely manner the nature of learners’ difficulties in processing content and to remediate them through clarification and other means. As honors faculty can surmise, particularly those who favor the Socratic method, the secret to such outcomes is rooted in

asking a given student audience the right questions at the right time (Beatty, Leonard, Gerace, & Dufresne; Bruff). Engaging teaching and active learning in the honors classroom can be just a click away.

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