

The Clicker Challenge: Using a Reader Response System in the (British) History Classroom

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MOST OF US ARE FAMILIAR with the television show *Who Wants to be a Millionaire?* When faced with a puzzling question, each contestant has a number of “lifelines” to help them choose an answer, including one known as “Ask the Audience.” The contestant asks the studio audience which of the four available answers they think is correct. Audience members indicate their selection by pressing the appropriate key on a keypad and the results are displayed for all to see. The contestant then is free to select the most popular choice, or not.¹ For a few years now, a similar technology has been available for teachers. Inserting questions into a PowerPoint presentation or running free-standing software, the class is asked to consider a question and select one of the available answers by pressing the appropriate number on a keypad—the accumulated totals are then displayed graphically for the entire class to see. The technology is known as Audience Response Systems (ARS) and the keypads are commonly known as “Clickers.”² This paper discusses the ways in which my use of clickers in a second-year university course introduces students to key themes in the history of Early Modern (fifteenth- to eighteenth-century) Britain.³

The use of clickers in the classroom has been discussed in a range of articles since the mid-2000s, and there continues to be vigorous discussion about their pedagogical value. Generally speaking, the literature falls into three categories: case studies that aim to offer “best practice” advice drawing

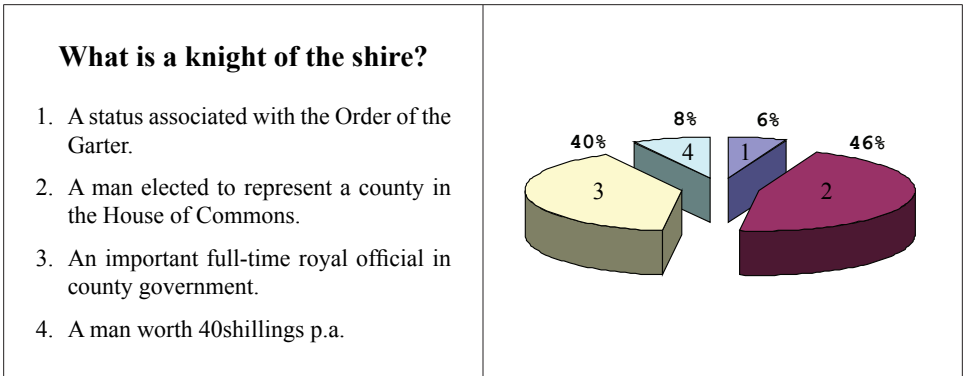


Figure 1: Clicker question and student response results.

on actual classroom experience,⁴ statistical analyses that demonstrate how the use of clickers improves class attendance or test and examination results,⁵ and those that explore how clickers improve student engagement in the learning process.⁶ These analyses draw largely upon disciplines in science, engineering, medicine, and business. When asking “Who uses Clickers?” in her valuable survey of the literature, Jane E. Caldwell found references to sixteen disciplines, only one of which—philosophy—can be said to be in the arts and humanities.⁷ This is not surprising given that the use of clickers was pioneered in subjects such as physics and biology, primarily as ways to “break up” a formal lecture, to generate student interest in course material, and to “check in” on student comprehension of textbooks and lectures. Here, I argue that as useful as they can be as a tool for testing both memory recall and understanding, and in making the classroom more engaging, clickers are also valuable tools in demonstrating various aspects of the historian’s craft, particularly the use of evidence, evaluating arguments, and engaging with historiography.

Given that early modern Britain is relatively foreign territory for most North American students, my decision to use clickers grew from the need to test student comprehension and knowledge. For example, after asking students to come to class having read the section in our textbook describing the various offices and honours available to elites in late fifteenth-century England, and following the twenty minutes I devoted to the topic in my lecture, I asked the class to answer a question posed in the standard multiple choice format: What is a knight of the shire? (Figure 1)

As this reveals, only 46% of my class knew the correct answer, that a knight of the shire is (2) A man elected to represent a county in the House of Commons. The remaining three answers were simply wrong. It was

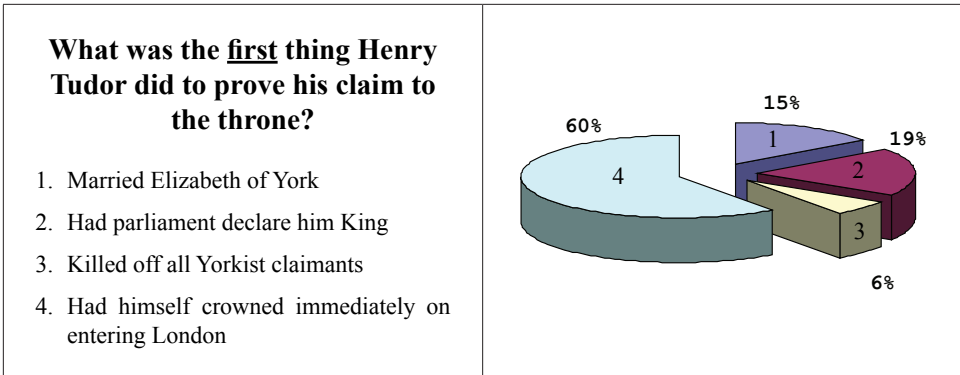


Figure 2: Clicker question and student response results.

clearly time for me to pause and review social structure, parliamentary representation, and local government for the class.

Many of my slides have been of this type and there is no denying that checking in with students' comprehension was helpful in encouraging me to take more time improving their understanding, in this case, of early modern government and politics. What was particularly useful, however, was that individual students were able to locate themselves in relation to, and in comparison with, those around them: there was nowhere for them to hide. Before I turned to clickers, I would ask the same sort of question aurally and, of course, class after class, it was the same students who were keen to offer their opinion. Even if I called upon someone else to answer, the problem remained that I had only really succeeded in finding out whether one student knew the answer, or not. It was all too easy for a student who had not been able to answer the question, or who guessed wrongly, to let themselves off the hook by reacting with a shrug and with thoughts such as, "Oh yes, I *really* knew that!"; "Oh, of course, I remember that now, I would have got it right if I'd been in an exam"; or "Well, probably everyone else except for the know-it-all in front thought like I did!" Clickers deny these options: the student is faced with the reality that they demonstratively *do not "really"* know and that, while nearly half the class understood what a knight of the shire was, they did not. As a teacher, one of the great values of clickers has been that it encourages learners to see themselves as part of a learning community, in relation to other learners, and to visually (even graphically) place themselves in relation to their peers in the classroom.

A different pedagogical opportunity arose from a similar slide that tested empirical knowledge about the accession of the first Tudor monarch: What was the first thing Henry Tudor did to prove his claim to the throne? (Figure 2)

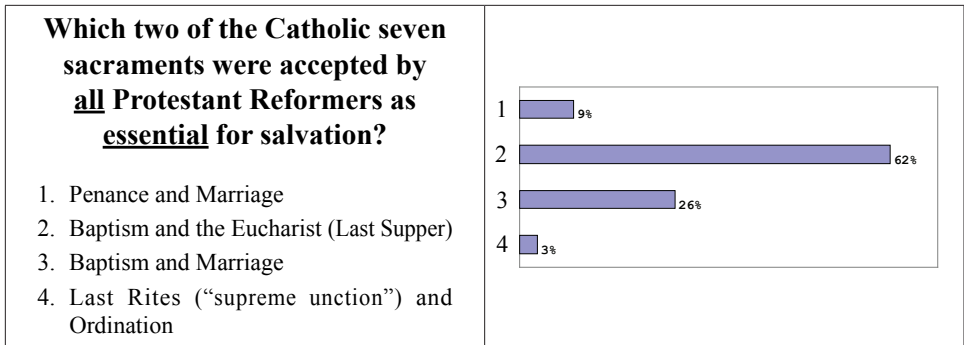


Figure 3: Clicker question and student response results.

The answer, correctly identified by 60% of the class, was that Henry first had himself crowned by right of his victory over the Yorkist Richard III; while he certainly solidified his position by marrying Elizabeth of York, by securing parliamentary support, and by eliminating key Yorkist rivals, it was his coronation that established the (somewhat dubious) claim of the Tudor dynasty. Most of the class recognised that the Yorkist claimants were eliminated only later in Henry’s reign, but a substantial number were drawn to the somewhat romanticised notion of Henry unifying the red and white roses of Lancaster and York through marriage or to their assumption that parliament was the most important political institution and so, of course, securing its support would be the first thing Henry would have done. This format offered a chance to explore in a more nuanced way the options open to, and the choices made by, the first Tudor ruler; it allowed us to consider what might have happened had he made another choice...it moved us away from mere factual comprehension to analysis.

Another useful format designed to achieve a more advanced pedagogical goal was my adaptation of an examination question format I had used in my first-year Western Civilization classes in previous years. For the first part of the examination, students would encounter a number of traditional multiple choice-type questions. For the second part, they were asked to choose one of the multiple choice questions from part one and write a short essay explaining why they had made their choice. They were instructed to justify their selection and explain why each of the other options had been rejected. This format revealed that, for some students, while they could recall something correctly from the textbook, they had little understanding of it; others demonstrated that even though they had made the wrong choice, they had some understanding of the issue or topic. Turning to clickers as a way of achieving the same goal, I offered

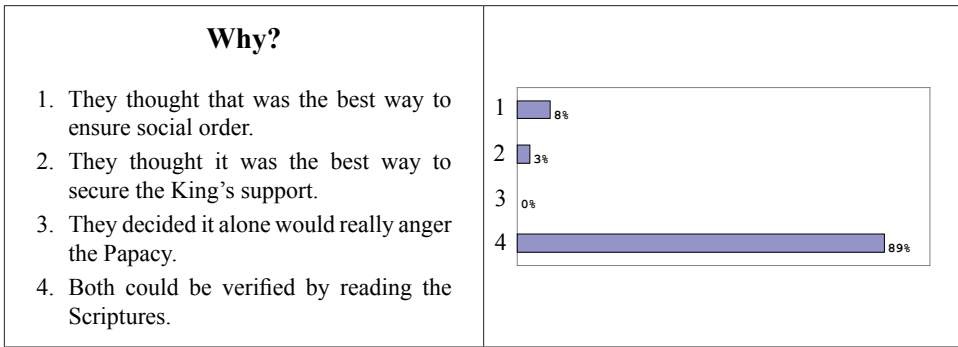


Figure 4: Clicker question and student response results.

two slides relating to theological beliefs in the sixteenth century. First, students were asked to identify the two sacraments acknowledged by both Catholics and Protestants as essential for salvation: Which two of the Catholic seven sacraments were accepted by all Protestant Reformers as essential for salvation? (Figure 3)

As these results demonstrate, a substantial number (62%) knew the right answer—baptism and the Eucharist. Still, given the theme of my lecture and the readings, a surprising number (38%) remained unclear on this issue. I was very concerned because we had spent some time talking about last rites and ordination as distinctively Catholic and penance as a belief that had led to practices most objected to by Protestants, such as excessive indulgences, pilgrimages, and the worship of relics. However, my next slide revealed that almost everyone in the class understood the criterion by which Protestants evaluated the Catholic sacramental system (whether verification could be found in the Bible): Why [were two of the Catholic seven sacraments accepted by all Protestant Reformers as essential for salvation]? (Figure 4)

Almost 90% of the class understood this and so I was able to distinguish between those who had not yet grasped that the Scriptures were used as the decisive criteria (and who therefore had opted for marriage and penance or last rites and ordination in the previous slide) and those who had not been able to accept that, while Protestants thought marriage was important in a godly society, they believed it was not essential for salvation. Without this second question, and thinking it through in relation to the first, I might well have simply concluded that 38% of my class needed a refresher on the sacraments.

Moreover, in our follow-up discussion about marriage, the issue of social order became a key point of debate. For those who had preferred

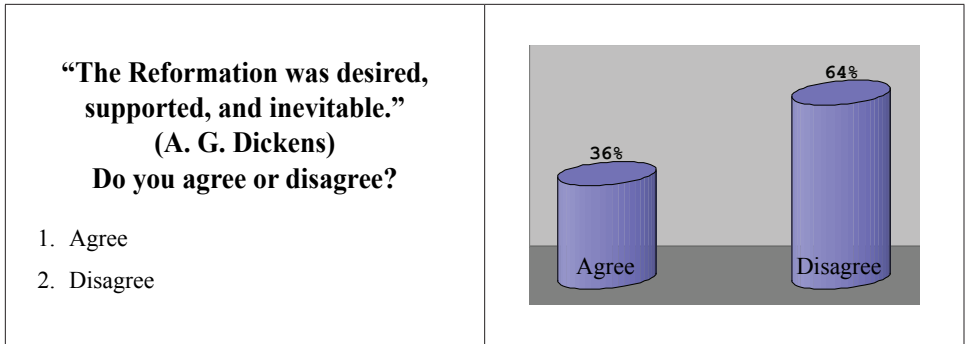


Figure 5: Clicker question and student response results.

marriage to the Eucharist or had opted for marriage and penance, I knew I had to search for other, non-theological reasons for an explanation, one of which was social order. Encouraged by the sort of discussion this type of question could stimulate, I began to use clickers as a way of engaging with the historian’s craft more generally. Like so many of us, I have encouraged students to engage with primary sources—written, visual, aural—as a way of closing the distance between present and past and as a way of beginning to develop critical analytical skills. Clickers provide the opportunity for students to engage with evidence and to be made aware that there are many different ways of reading primary sources—there are no “right” or “wrong” answers necessarily, but there are competing interpretations that themselves need to be engaged with, explained, and explored. Similarly, clickers enabled students to engage with historiographical interpretation—grappling with historians who disagreed with each other on a particular question or topic.

For example, continuing with the English Reformation, one slide asked them to think about the primary evidence we had been examining in classroom and in their textbook and consider where they stood on one of the key debates in early modern English history: “The Reformation was desired, supported, and inevitable.” (A. G. Dickens). Do you agree or disagree? (Figure 5)

For many students in the class, it was quite shocking that they could be so divided on this issue, having read the same textbook and explored the same primary sources. While 64% supported more recent “revisionist” approaches to the Reformation—that it happened more slowly and with less popular support than A. G. Dickens had believed—a substantial number of the class accepted the Dickens interpretation. This provided me with the opportunity to send the class away with a task: go back to

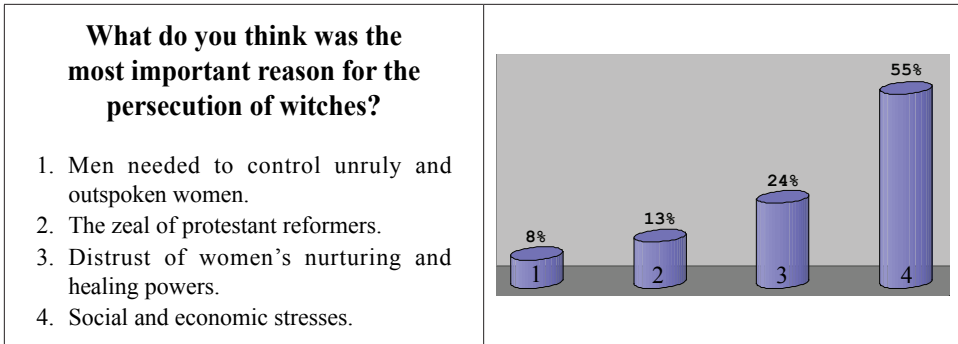


Figure 6: Clicker question and student response results.

the primary and secondary sources and return to the classroom where we would explore what evidence supported each of these two positions and what arguments could be mustered to try and convince others to change their minds. Pedagogically, it helped to convey to students that there was no “right” or “wrong” answer and, even more importantly, that “history” was about *interpretation*, not *facts*.

One of the more difficult aspects of the historian’s craft is to convince students that to take a particular point of view and support it with serious argument, along with reference to evidence and to interpretations of cause and effect, is not the same thing as being “biased” and cannot be so easily dismissed. In our class discussions of witchcraft, the opportunity arose to explore how new understandings of women’s roles in early modern society have been achieved through the work of feminist historians and, most recently, those attuned to the history of sexuality and the body: What do you think was the most important reason for the persecution of witches? (Figure 6)

Students answered this question having read a range of secondary sources on the topic. The technology allowed me to register their votes and, having analysed them after this class, I was able to report back to them that there was also a gender dimension to their answers: many more men in the class chose option (4) and almost all of those choosing answers (1) and (3) were women. I invited the class to read two important sources for our understanding of witchcraft in this period: pamphlet accounts of a case of witchcraft and trial records, particularly those offered in the extraordinarily valuable Scottish Witchcraft project by the University of Edinburgh’s School of History and Classics.⁸ In the next class, I asked a follow-up question: From the cases you have looked at, do you agree with the view that the attack on witches was an attack on women? (Figure 7)

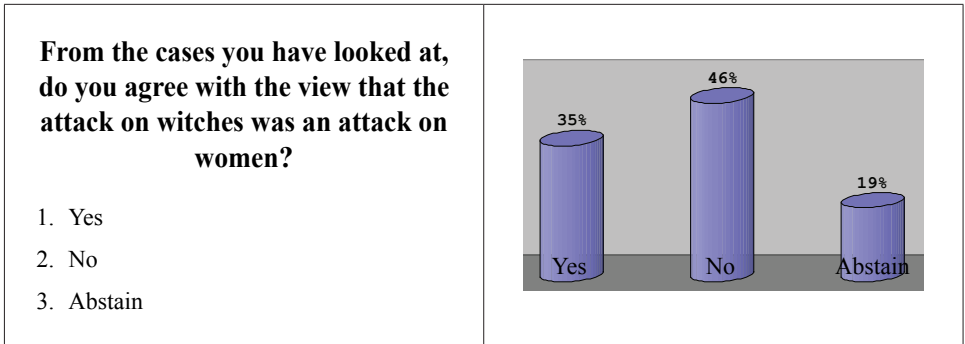


Figure 7: Clicker question and student response results.

Obviously, the class remained very divided and this led to a vigorous debate about how the gender of the historian might shape the questions they asked, the way they read evidence, and the conclusions they reached. It provided an important corrective to assumptions that the role of the historian is to somehow shed their selves and their world to uncover the truth objectively. Students left the classroom thinking about how far historians could shed their gender, race, ethnicity, or sexual identities when it came to engaging with the foreign country that is the past.

My use of clickers had come a long way. Initially, I saw them as an opportunity to test how well my students were keeping up with the reading—whether, in fact, they had been doing the reading—and give them the opportunity to show what information they had learned. I could build such questions into my PowerPoint presentation, and this gave me the opportunity to pause in the lecture and check on how well I had done in conveying the information I had been speaking about. Indeed, because one can quickly create a slide even during the class and incorporate it into a Point on the spot, this could happen quite spontaneously as well. It was a way of breaking up the lecture in an exciting, interactive way. Moreover, there were several advantages of this from the perspective of the student, perhaps the most important pedagogically is that everyone in the class was involved in making these choices, not just those who were especially confident or outgoing. As a test in comprehension, it gave a clear indication to each student about how well they had been managing the material, an indication that was visual, interactive, and immediate. All of this confirmed what teachers in other disciplines had been saying about clickers.

However, I soon realised that clickers provided me with an opportunity to help students see the past as not something that is fixed—a given that has to be learned—but that people in the past had agency and made choices,

and that these, too, are worth considering and exploring. Most importantly, clickers provided me with the opportunity to explore some key features of the historian's craft with my students. It was an exciting way—and a very interactive, student-centred way—for them to discover that historians can examine the same evidence and come to startlingly different conclusions and that, although arguments are made on evidential grounds, different approaches, theories, and methodologies as well as differences in the makeup of the historians themselves might explain how those arguments were assembled, how evidence was used, and how conclusions were reached. These were factors that had to be weighed up and measured, thought about, and discussed. This experience supports the observations of some recent work done on clickers in the genetics classroom: that in-class “concept” questions were very effective teaching tools⁹ and that most students found clickers improved their learning.¹⁰

My experiential account of using clickers in the history classroom supports the findings of several more statistically sophisticated studies of their use in the teaching of other disciplines. While more technical studies are needed to fully understand the ways in which the use of ARS enhances learning in the history classroom, my experience shows that they can contribute to student understanding of, and engagement with, our discipline. Demonstrating that history is not “all about facts;” that, beyond the basics, there are no necessarily “right” or “wrong” answers to the questions we ask about the past; and encouraging students to consider key issues of evidence, argument, method, and approach, clickers are a useful tool in offering students the opportunity to explore the complexities of the historian's craft.¹¹

Notes

1. Disney/ABC Domestic Television, “Who Wants to Be a Millionaire (Season 10) Official Rules,” revised 23 August 2011, <<http://www.dadt.com/millionaire/auditions/rules.html>>.

2. The most common use of ARS has been through individual response units, purchased or rented by students. However, more recently, software has allowed the use of cell phone technology. R. Mulye and K. Westberg, “Mobile Phone Clickers in the Classroom: Experiences from a Large Introductory Marketing Class,” *The World University's Forum* 2009 2, no. 5 (2009): 109-121.

3. This study draws on my experience of two classes of HIST 2500: Early Modern Britain in 2007-2008 and 2010-2011, each comprising over one hundred students, using Turning Point Technology's ARS.

4. Jane E. Caldwell, "Clickers in the Large Classroom: Current Research and Best-Practice Tips," *CBE—Life Sciences Education* 6, no. 1 (March 2007): 9-20; Michael E. Lantz, "The Use of 'Clickers' in the Classroom: Teaching Innovation or Merely an Amusing Novelty?" *Computers in Human Behaviour* 26, no. 4 (July 2010): 556-561.
5. Richard E. Mayer et al., "Clickers in College Classrooms: Fostering Learning with Questioning Methods in Large Lecture Classes," *Contemporary Educational Psychology* 34, no. 1 (January 2009): 51-57; Beth Morling, Meghan McAuliffe, Lawrence Cohen, Thomas M. DiLorenzo, "Efficacy of Personal Response Systems ('Clickers') in Large, Introductory Psychology Classes," *Teaching of Psychology* 35, no. 1 (January 2008): 45-50; Debra L. Dawson, Ken N. Meadows, and Tom Haffie, "The Effect of Performance Feedback on Student Help-Seeking and Learning Strategy Use: Do Clickers Make a Difference?" *The Canadian Journal for the Scholarship of Teaching and Learning* 1, no. 1 (June 2010), <http://ir.lib.uwo.ca/cjsotl_rcacea/vol1/iss1/6>.
6. Stephen Addison, Adrienne Wright, Rachel Milner, "Using Clickers to Improve Student Engagement and Performance in an Introductory Biochemistry Class," *Biochemistry and Molecular Biology Education* 37, no. 2 (March/April 2009): 84-91.
7. Caldwell, 9-20.
8. Julian Goodare, Lauren Martin, Joyce Miller, and Louise Yeoman, "The Survey of Scottish History, 1563-1736" (January 2003), <<http://www.shc.ed.ac.uk/Research/witches/>>.
9. Kirsten Crossgrove and Kristen L. Curran, "Using Clickers in Nonmajors- and Majors-Level Biology Courses: Student Opinion, Learning, and Long-Term Retention of Course Material," *CBE—Life Sciences Education* 7, no. 1 (March 2008): 146-154; M. K. Smith, W. B. Wood, K. Krauter, and J. K. Knight, "Combining Peer Discussion with Instructor Explanation Increases Student Learning from In-Class Concept Questions," *CBE—Life Science Education* 10, no. 1 (March 2011): 55-63.
10. Michele F. Barbour found that, while appreciation of clickers grew for some students over the duration of her dentistry course, for others, this was not the case. M. E. Barbour, "Electronic Voting in Dental Materials Education: The Impact on Students' Attitudes and Exam Performance," *Journal of Dental Education* 72, no. 9 (September 2008): 1042-1047.
11. I would like to thank Carleton University's Education Development Centre for their help in using clickers in my teaching, particularly Patrick Lyons. Thanks also to Professor Janet Siltanen for her comments on this paper.