



## **Improving Textbooks as a Way to Foster Civic Understanding and Engagement**

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Efforts to improve civic education, such as the Campaign for the Civic Mission of Schools, face a conundrum. On the one hand, students report that they are more likely to learn about democracy and citizenship through reading textbooks than through any other activity. Indeed, according to the National Education Association, reading is the gateway to learning in all content areas. Estimates show that textbooks determine 75-90 percent of instructional content and activities in schools across the nation. On the other hand, reviews of textbook materials repeatedly find them to be turgid, poorly organized, and uninteresting. These are features of writing that are unlikely to enhance learning or motivation. Compounding the problem, 69 percent of eighth graders scored below Proficient on the 2005 National Assessment of Educational Progress in Reading. They failed to demonstrate a level of literacy necessary to comprehend and learn from reading challenging subject matter. Poorly designed textbook materials would be particularly ineffective for the many students lacking strong literacy skills.<sup>2</sup> In the ideal world, all students would be reading and learning from textbooks and other text materials that are comprehensible, concerned with important civic issues, and encourage students to participate in civic activities. In short, improving textbooks might help to solve the conundrum.

In this paper we describe a recent study in which tenth graders who had parent permission were randomly assigned to read one of three types of passages about direct and representative democracy. After reading, all students responded to the same tasks to measure their understanding and their motivation to engage in civic-related activities. Students came from regular classes in two middle class high schools, one from a West Coast state and the other from a state in the Mid-Atlantic region. We chose to collect data on two sides of the country, believing that often, research conducted in one location has been generalized too widely.

Eighty-five 10<sup>th</sup> graders from the West Coast and 83 students from the mid-Atlantic participated in the study. Slightly more than half of the students

from both schools were female. The largest number of students from the two schools identified themselves as white English speakers. Within this general description, students from the mid-Atlantic school were more diverse ethnically and linguistically than students from the West Coast school. In the West Coast school 87% of the students identified themselves as white, and almost all identified themselves as English speakers. Forty-two percent of students from the mid-Atlantic identified themselves as white, 38% as Black or African American, 6% as Asian, and 14% as other. Twelve percent reported that they spoke English and another language at home, and 7% another language only. Students from both schools rated their reading ability on a 5-point scale from below average to above average,  $M=3.84$ ,  $sd=.77$  for the West Coast school and  $M=3.70$ ,  $sd=.82$  for the mid-Atlantic school. However, the differences between the two schools on this measure were not statistically significant.

In following sections, we explain the characteristics of the texts and tasks, and report the outcomes. This work demonstrated the potential of reading well-designed passages to raise students' interest in participating in civic-related activities and their understanding of our country's democracy. It also presented models for designing text material that could be applied by publishers to the design of textbooks and other materials students are asked to read.<sup>3</sup>

## DESIGNING TEXTS TO FOSTER CIVIC UNDERSTANDING AND ENGAGEMENT

Texts constructed for this study focused on the characteristics of and relationships between direct and representative democracy, two topics that are often presented separately in textbooks rather than related to each other. An examination of frequently chosen wrong answers to items about these topics on the IEA Civic Education Study<sup>4</sup> had suggested many 14-year-olds believe that direct democracy is a better form of democracy because representative democracy necessitates a "middleman," who

can become corrupt. To identify how best to communicate the relationships between direct and representative democracy, we turned to curriculum frameworks. We also consulted writings by political scientists, which revealed that experts do not agree with one another about the optimal balance between the two types of democracy. To communicate with one another and the larger public, political scientists design their texts to inform (presenting lots of facts), to argue (taking a stance on the optimal relationship), and to explain (presenting many examples and analyzing them according to democratic principles). We built on a synthesis of the curriculum frameworks and the work of political scientists to design three texts to present the topics of direct and representative democracy for this study. Throughout we refer to them as Inform, Argue, and Explain. Most textbook material is designed to inform.<sup>5</sup> We aimed to compare the effect on student understanding of texts designed to argue and explain as well. These text designs are similar to those used by experts to convey complex civic content and those recommended by experts in reading as well. Argument and explanation, both designed to communicate ideas as well as facts, could expand student understanding and interest beyond what might be expected from fact-laden, idea sparse, textbook material.

All three text designs contrasted direct and representative democracy and drew parallels between the two. Inform presented the parallel historical sequences for the two types, followed by facts about the strengths and challenges of first direct and then representative democracy. Argue claimed that direct democracy is the only real democracy, countered by a claim about its problems, followed by a new claim about the value of representative democracy, countered by a claim about its problems, and concluded with a claim that each can be better than the other depending on the political context.<sup>6</sup> Explain followed the same logical order as Argue. For direct and representative democracy, it presented high school examples followed by an extensive example in government. It concluded with discussions of who could

participate, who did participate, and whether the laws passed met the needs of as many people as possible, or as Lincoln said so eloquently, whether the process was of, by, and for the people. Fifty-seven students read Inform, 54 read Argue, and 57 read Explain.

As different as they were, all three designs were also constructed to enhance comprehension. Incomprehensible texts would be unlikely to foster motivation or understanding. After discussing comprehensibility, we report effects on motivation and understanding.

Research has demonstrated that what readers comprehend is strongly affected by whether the writing is logically coherent and has introductory and concluding material, paragraph topic sentences, content that builds on what readers already know, and vivid scenarios to interest readers<sup>7</sup>. Differences in text designs can affect comprehension as well. Readers recall arguments differently than texts intended to inform and can accurately distinguish between the two designs, for example.<sup>8</sup> To enhance reader comprehension, we organized Inform, Argue, and Explain coherently, included content that should be familiar and of interest to tenth graders, provided clear topic sentences in each paragraph, and began and ended with introductions and conclusions that summarized the major ideas. The texts were each about 1900 words. Reading one of the assigned texts and answering the questions took students about 50 minutes.

Three tasks measured how well tenth graders could comprehend the three different text designs. Students rated the comprehensibility of major text sections as they read from "Very difficult to comprehend" (1) to "Very easy to comprehend" (5), and used the same scale to rate the text as a whole once they had finished reading. This was a check on the effectiveness of the features of comprehensible writing that we had built into the texts. They also rated the interestingness of the text that they had read on a scale from "This passage is very uninteresting to read" (1) to "This

passage is very interesting to read" (5). Text interestingness is another important feature of comprehensibility. Finally, students identified the pattern in the text that they had read (Inform, Argue, or Explain).

All of these measures suggested that most tenth graders comprehended these carefully designed texts. They tended to rate sections from all three text versions as comprehensible on the 5-point scales ( $M=4.01$ ,  $sd=.69$  summed across all sections, and  $M=3.91$ ,  $sd=.76$  for the text as a whole after reading). They also rated all three text versions as moderately interesting ( $M=2.97$ ,  $sd=.98$ ). Finally, the percentage of students who identified the text accurately was above chance for all three text versions, although the percent for Explain was higher than for Argue and Inform.

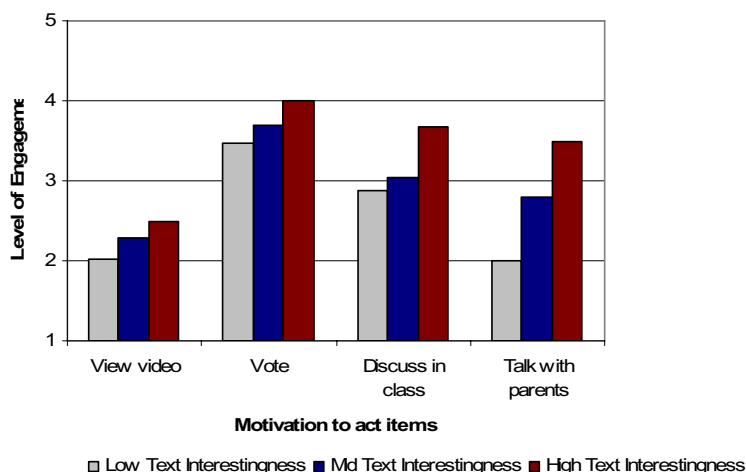
## THE POTENTIAL OF READING TO MOTIVATE STUDENTS TO ENGAGE IN CIVIC RELATED ACTIVITIES

Although history and social studies textbooks in general have many aims, civic-related textbooks are expected to foster motivation to learn more about and to engage in civic activities. No matter how readily comprehensible or supportive of understanding a text might be, most educators would consider its design problematic if reading it

did not motivate students to seek to apply what they have learned to understand civic and political life and to engage in civic activities. The tenth graders in this study completed four items to characterize their motivation to take action after reading their assigned text. For all four items, we asked students to consider a hypothetical scenario in which a ballot measure proposed replacing representative democracy with direct democracy. Students rated on a scale of 1-5 how likely they would be to watch a video clip about the measure, vote in a special election, give their opinion in a class discussion, or talk with their parents. They also rated on similar scales how interested they generally are in the topics in their social studies class.

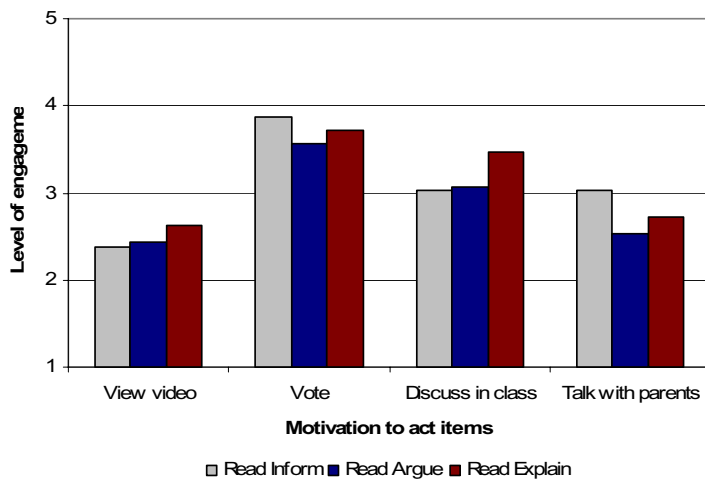
Students' general interest in social studies topics affected their interest in viewing a video, voting, discussing in class, and talking with parents. To the extent that they were interested in social studies topics, they also expressed interest in participating in these activities. We expected that students' interest in social studies would relate to their interest in various civic related activities. However, our focus for this study was on the relationship of reading a particular passage to interest in taking action: that is, on students' motivation to act, over and above their general interest in social and political topics. The analyses that we report below control for general interest in social studies

Figure 1. Means for motivation to act items depending on how interesting students found the text to be



□ Low Text Interestingness ■ Md Text Interestingness ■ High Text Interestingness

**Figure 2. Means for motivation to act items depending on the design of the text that students had read**



At first glance, figures 1 and 2 appear similar. Students gave higher ratings to voting and discussing in class than to viewing a video or talking with parents, a pattern that is not statistically significant, however. Of greater importance, within this overall pattern, students' ratings differed by whether they found the text they read to be interesting and whether they had read Inform, Argue, or Explain. Text interestingness, regardless of text design, had a strong effect on their motivation to act. As figure 1 shows, for each of the four Motivation to act items, the differences between low and high text interestingness are obvious, particularly for Discuss in class and Talk with parents. Figure 2 shows differences due to text design to be somewhat more complex. Perhaps the best way to understand these differences is to focus on each of the three text designs independently. Compared to students who had read the other two text designs, the means for students who had read Inform were higher for Vote and Talk with parents. Students may have anticipated that the many facts in Inform would be useful in participating in activities outside of class. The means for students who had read Explain were higher for View video and Discuss in class than the means for students who had read the other two text designs. These students may have anticipated that the many examples in Explain would be useful for in-class activities. The means for students who had read Argue were in-between the means for the other two

designs for all Motivation to act items. Reading the controversies in Argue did not show any differential effects on students' motivation for the four tasks, but Argue did not seem to harm student motivation either.

## THE POTENTIAL OF READING TO AFFECT CIVIC UNDERSTANDING

The likelihood of participating in civic activities depends to some extent on the degree to which citizens understand the complex processes in our democracy. To demonstrate the effects of reading on their understanding about democracy, students completed three types of tasks before and after reading. They rated their perceived knowledge about direct and representative democracy compared to an adult expert on 10-point scales from "Nothing at all" (1) to "A great deal" (10) prior to and following reading. They chose the type of democracy that they thought was best for the country and justified their answers with an open-ended response before and after reading. We scored justifications on a 5-point scale from 1 (Don't know; grossly inaccurate) to 5 (Expert understanding that demonstrates the complexities of the relationship between direct and representative democracy. Under certain conditions, one is better than the other.) Finally, after reading students completed multiple-choice questions

with one correct answer and three distracters. The questions were of four types: items common to all texts and items unique to Inform, Argue, or Explain.

Comparisons of students' perceived knowledge before and after reading suggest that reading positively affected students' perceptions of their understanding about direct (M=5.18, sd=1.88 before and M=6.90, sd=1.49 after reading) and representative democracy (M=4.93, sd=2.15 before and M=6.96, sd=1.57 after reading). In addition, when asked to justify their reasons for choosing a particular form of democracy as the best for the country, their short written answers demonstrated greater expertise after reading (M=2.89, sd=1.11) than before reading (M=2.26, sd=.88)

These examples illustrate the understanding of three students after reading.

Direct and representative democracy are both a very important part in our country. I think direct democracy should be held locally. However, I think representative democracy is important for Federal consensus. Those decisions should be made for bigger issues. (Scored 5)

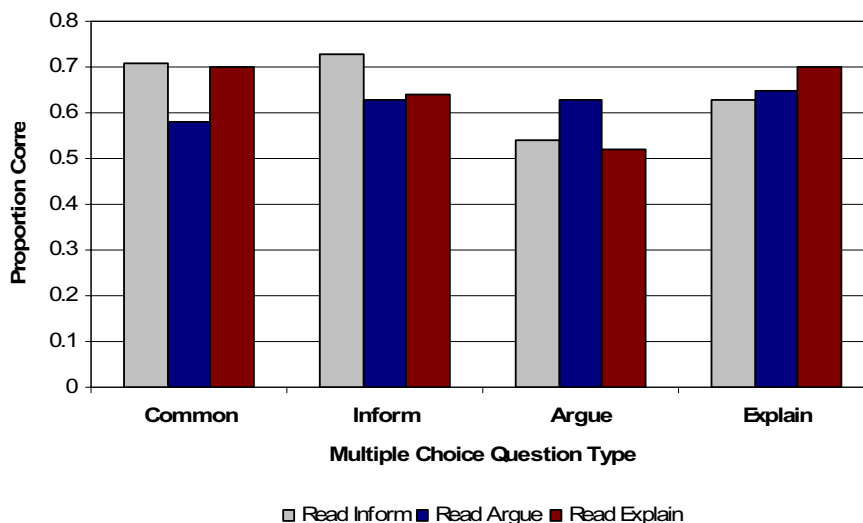
A combination of direct and representative democracy is the best for our country. Their [sic] should be representatives, but they should not have all the power because they can become selfish and forget about the people vote, it can balance out the power better. (Scored 4)

I think that a combination of the two types is best for our country. By having people vote for representatives, our country can get the say of a lot of people without having to have each person individually vote on every subject. (Scored 3)

Students' answers to the multiple choice questions suggested which texts seemed to support student understanding of content common to all texts, and also what type of understanding students took away from the three texts. Figure 3 shows that Inform and Explain supported student understanding of crosscutting content better than Argue. An example of an item measuring content found in all three texts follows:

A common problem for direct and representative democracy is the majority of citizens do not vote.

**Figure 3. Mean proportion correct for types of multiple choice questions by text type read: A content understanding measure.**





The figure also shows that students answered items covering material in the text they had read more accurately than items from texts they had not read. Recall that Inform presented facts, Argue presented claims and counterclaims, and Explain presented examples and related them to Lincoln's model. We prepared these items to measure the type of understanding that we had designed into each type of text design. Example items appear below:

**Inform:** The US Constitution set up representative democracy as a way for citizens to have some say about laws governing the whole country.

**Argue:** Some people argue that representative democracy is a stronger form of democracy than direct democracy because representatives have the time to develop expertise on issues.

**Explain:** When it is working well, representative democracy is closer to "government for the people" than citizens voting in town meetings because representatives consider the views of constituents along with their own.

The design of the text that students read tended to affect the nature of their understanding of facts for Inform and of complex relationships for Argue and Explain.

## IN CONCLUSION

In the ideal world, textbooks would be concerned with important issues in civic-related understanding and would also engage students to participate in civic activities. An important purpose of our work has been to demonstrate that it is possible to design texts that support student motivation to act and also to enhance student understanding about important, complex relationships in civics. We were prepared to learn that high school students would lack the literacy proficiencies to be able to take advantage of complex ideas

about democracy built into a text no matter how carefully designed. And yet students expressed interest in civic engagement and increased their understanding by reading sophisticated texts similar to those that political scientists use to communicate their ideas to each other. We suspect that students have had little prior experience with the conflict implied in written argument or the complexities contained in explanation. These two text designs rarely appear in either Government or American History textbooks.<sup>9</sup> It would not have been surprising if only the more familiar Inform had led to the desired effects. Nonetheless, there were few differences in outcomes among the three texts. Apparently, students were able to take advantage of the features in all three designs and found them to be comprehensible, to enhance their understanding, and to spark their interest in engaging in civic activities. In fact, even students who were not especially interested in social studies in general became more inclined to participate if the text passage was interesting to them.

The differences that did occur among the three designs seem important to us, however. Reading Inform tended to enhance students' factual knowledge, information that they could use to vote and to talk with adults. Reading Argue and Explain tended to enhance students' understanding of complex relationships. The effects of Explain particularly intrigue us because they appear to suggest that texts with many examples drawn from government and school life, not only enhance students' content understanding, but also encourage students to participate in class activities. These differences in understanding and motivation from reading texts designed to inform, argue, or explain lead us to recommend that textbooks and other types of instructional texts for high school students incorporate the major text designs used by experts to communicate complex, nuanced relationships. Students would encounter both facts and ideas from reading such textbooks. In addition, by incorporating explanation, textbooks in history and social studies might do a better job of engaging students to participate in civic-related classroom activities. This could even be the case for students who find social studies to be unengaging.

## ENDNOTES

- 1 Marilyn Chambliss is a faculty member in Curriculum and Instruction, while Wendy Klandl Richardson, Judith Torney-Purta, and Britt Wilkenfeld are, respectively, a former doctoral student, a faculty member, and a current doctoral student in the Department of Human Development at the University of Maryland. The research was supported by a Discretionary Grant from the Carnegie Corporation of New York to Torney-Purta and Chambliss, from 2003 through 2005.
- 2 For a fuller discussion of these issues, see *Textbooks for learning: Nurturing children's minds* by M. J. Chambliss and R. C. Calfee, Malden, MA: Blackwell (1998).
- 3 "Different structures of text material and their effects on students' civic knowledge and engagement," by J. Torney-Purta, M. Chambliss, and W. Richardson, Final Report submitted to the Carnegie Corporation of New York (2005).
- 4 "Strengths and weaknesses in U.S. students' civic knowledge and skills: Analysis from the IEA Civic Education Study," by J. Torney-Purta and C. Barber, College Park, MD, CIRCLE (2004).
- 5 For a fuller discussion, see Chambliss and Calfee (1998).
- 6 The claims and counterclaims came primarily from *Real Democracy* by F. M. Bryan, Chicago: The University of Chicago Press (2004), and *Republic on Trial* by A. Rosenthal, B. A. Loomis, J. R. Hibbing, and K. T. Kurtz, Washington, DC: CQ Press (2003).
- 7 Commentary: Improving instructional text: Some lessons learned by M. R. Graves, M. C. Prenn, J. Earle, M. Thompson, V. Johnson, and W. H. Slater, *Reading Research Quarterly*, 26, 110-122 (1991).
- 8 Text cues and strategies successful readers use to construct the gist of lengthy written arguments by M. J. Chambliss, *Reading Research Quarterly*, 30, 778-807 (1995).
- 9 Chambliss and Calfee. (1998).



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