We the People: Elementary Pre-Service Teachers and Constitutional Readability

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In light of increasing mandates to incorporate close reading of primary source historical documents at the elementary level, this study explored the reading difficulty level of the US Constitution with pre-service elementary teachers using a traditional cloze assessment procedure. While best practice pedagogy of social studies has long included thoughtful reading of primary sources, new language arts guidelines situate the analysis of primary documents within formulaic quantifiable frameworks, often problematic to the pre-service teacher. With implications for reading and social studies, this paper explores several relevant issues to both pre-service teachers and the elementary classrooms they will teach in.

Introduction

As a national and historical document, the Constitution receives tacit and token, yet symbolic, attention in elementary and secondary textbooks, high honor in museums and archives, and serves as a source of fierce political disagreement in our modern day times. While many children and adults are familiar with the existence of the Constitution, few attempt to read it in its entirety, and far fewer successfully understand its content. While best practice pedagogy of social studies has long included the close reading of primary source documents, Common Core State Standards (CCSS) have situated the reading of primary documents within quantifiable and formulaic reading rhetoric. This increased attention to evidencing complexity complicates the practices of pre-service teachers because it shifts the focus from teaching texts to examining texts for complexity in teachers’ already hectic schedule. Further, elementary teacher often have considerable lack of knowledge and experience with the Constitution as a civic document and face challenges teaching it as social studies is marginalized in the elementary classroom.

The purpose of this study was to determine the reading difficulty level of the Constitution for pre-service elementary teachers using a cloze procedure and to argue that the cloze assessment is a quick, simple, valid, low-cost means to measure students’ comprehension of complex texts. Most pre-service teachers in our study had not read the Constitution and had only taken a handful of history or government classes prior to their admittance into teacher education. The Constitution is a complex document and there is no readability formula, flawed as they are, that places the Constitution anywhere other than at college reading levels. At the same time, there is an expectation that elementary teachers will teach a variety of historical documents and civic ideals, including the Constitution, in schools and classrooms where social studies instruction is already marginalized. In our own state, the Constitution is specifically mentioned in the K-6...
state social studies standards documents at each grade level. With the adoption of new Common Core State Standards, which places high emphasis on informational literacy and primary source texts, this expectation increases. Further, a 2004 federal law mandated that all schools receiving federal funding provide educational programs on September 17, Constitution Day. As social studies and reading teacher educators, we were concerned with this primary question: How will pre-service elementary teachers experience the reading difficulty of the Constitution and what impact will this information have on expectations and realities of their future classroom practice?

Revisiting Relevant Literature

A national survey conducted in 2002 by the Public Agenda Foundation, in partnership with the National Constitution Center asked what typical adults knew about the Constitution. This study found Americans, “often remarkably uninformed about important constitutional issues” (pg. 14) with only 16% claiming a “detailed knowledge of the Constitution” and 66% being “generally familiar” with the document. In a follow up question, 67% of respondents said it was “absolutely essential for ordinary Americans to have a detailed knowledge of” (p. 16) although few recall meaningful learning in their educational experiences.

Hess (2008) contended that social studies teachers must engage students in democratic discourse concerning controversial issues. Hess suggests that students need to understand documents such as the Constitution in order to “deliberate controversial issues, especially those that focus on public problems and participate effectively in a democratic society” (p. 124). Levine and Lopez (2004) surveyed a random sample of 1,600 young Americans (15-25 year olds) and asked them what they remembered about government classes when they were in school. These researchers found that 45% of the respondents listed the Constitution and how it works as the most memorable part of government classes. The next closest item was one concerning great American heroes (30%), followed by military battles and wars (25%). In contrast to what Hess determined was essential, Levine and Lopez found that only 11% of the respondents reported that “problems facing the country today” was the area of study most emphasized.

Dwyer and King (1991) found in their first examination of Constitution readability that 25% of pre-service teachers demonstrated substantial difficulty and probable frustration in reading a selected passage while most others fell into the instructional level range of readability. Few pre-service teachers fell into a level where they were able to read independently and without frustration or assistance. The preparation of elementary teacher candidates also falls into question. Dumas (1993) found that most pre-service teachers have deficiencies in their social science coursework and take few content courses. Although pre-service teachers typically take a social studies methods course, Slekar (1998) suggests that elementary teachers hold relatively negative views on the subject.

Similarly, elementary pre-service teachers, in our experience as reading and social studies teacher educators as well, seem to have little understanding, time for deep reading of, or interest in teaching historical documents (such as the Constitution or other historical texts) and share freely in our K-6 social studies methods courses that they feel insufficiently prepared to teach it and personally are perplexed by its meanings. A narrowed curriculum that often excludes social studies and civic education also contributes to this dilemma since social studies instruction has taken a far back seat to other instructional areas in the last fifteen years. Elementary teaching of social studies is greatly marginalized in this era of high stakes accountability and audit culture. Rock et al. (2004) illustrated this in their study of elementary teaching of social studies with only 23% of
A recent exchange highlights this struggle for social studies in the elementary classroom. Secretary of Education, Arne Duncan (2012) speaks of the important and vital role that social studies should play and that marginalizing them equates to educational neglect while arguing for more standards in the social studies and better tests for them. In a counter response piece, Goldberg, Golston, Yell, Thieman, and Altoff (2012) suggest that there is a fundamental misalignment between good intentions and administrative policy initiatives (i.e. Race to the Top) that no longer allow for the engagement of students in critical thinking, long term creative projects, and interdisciplinary connections. While few students will grow up to perform quadratic equations, every student grows up a citizen with the ability to vote.

Another area of concern for some stakeholders is in the literal vs. living interpretation of the Constitution. Social studies and history teachers, particularly in the upper elementary and secondary grades, must often contend with issues raised within texts and within the community concerning application of the Constitution to particular situations. In a 2011 Time magazine article, Stengel concluded “Americans have debated the Constitution since the day it was signed, but seldom have so many disagreed so fiercely about so much” (p. 34). With the passage of the 2004 Constitution Day mandate for all schools receiving federal funds, some schools have purchased packaged content or one-day educational programs ranging in widely divergent philosophical views. Commonly lauded national curriculum projects exist such as Project Citizen and We the People (Hart, 2002). On a more local level, some political groups have organized “adopt a school” constitution week education programs that have generated some criticism (Miller, 2011).

A final area of review is in related readability determinations for the Constitution and the text complexity implications for the Common Core standards. The Common Core State Standards (CCSS) calls for teachers to teach the Constitution specifically, beginning in 11th and 12th grade, asking students to:

- Delineate and evaluate the reasoning in seminal US texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., The Federalist, presidential addresses).
- Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. documents of historical and literary significance (including The Declaration of Independence, the Preamble to the Constitution, the Bill of Rights, and Lincoln’s Second Inaugural Address) for their themes, purposes, and rhetorical features. (National Governors Association, 2010, p. 40)

Beginning in 6th grade, CCSS asks students to analyze, cite, and integrate primary documents when reading and writing. While not naming the constitution or other primary documents, CCSS asks 2nd grade students to describe the connections between historical events and procedures that occur within a text. However, second grade social studies standards still in place in the authors’ state call for students to “Describe the Constitution of the United States and the Tennessee State Constitution in principle and practice” (Tennessee DOE, Second Grade State Social Studies Standards).

There is no readability formula that places the Constitution anywhere other than at college reading levels. For example, The Lexile Framework for Reading, places the US Constitution at a 1540L Lexile level. The
following subsections discuss relevant literature regarding the cloze procedure as a means to match students with leveled text, text complexity in light of readability formulas such as the Lexile framework.

**Cloze Procedure**

The cloze procedure was developed by Taylor (1953) as a means of measuring the complexity level of printed material for individual readers. For his purposes, Taylor defined the cloze procedure as a “psychological tool for gauging the degree of total correspondence between (1) the encoding habits of the transmitter and (2) the decoding habits of the receivers” (p. 415). Taylor suggested that the application of the cloze measure requires the interception of a message between a transmitter, who is the reader (or writer) and a receiver, who is the reader (or listener).

Taylor (1953) developed measures in which every fifth word was deleted. The subjects were advised to try to fill in the deleted terms. Taylor reasoned that, based on Gestalt psychological principles, a person presented with a nearly completed circle would perceive the almost-circle as a whole. Taylor determined that the same principles would apply to language. In other words, Taylor proposed that ability to complete passages with deletions is an acceptable predictor of how difficult that passage is for the individual who is charged with the task of completing the cloze measure. For example, Taylor suggested that upon seeing a sentence such as, “The American flag is _____, white, and blue.” Readers familiar with the content would “almost instantaneously and quite unconsciously close the gaps” (p. 415) by filling in the word “red”. Overall analysis of findings, led Taylor to conclude that readability and comprehensibility are synonymous terms.

Substantial research has demonstrated the validity of cloze measures to determine difficulty level of particular reading passages for individual readers. Bormuth (1966), for example, determined that cloze measures assess comprehension in much the same way as well-constructed traditional multiple-choice questions. Bormuth (1969) replicated the earlier study and found similar results as Rankin and Culhane (1969). In this light, Ransom (1970) compared the reading levels found by a cloze measure and an informal reading inventory for 178 boys and girls in grades one through six. Ransom concluded that the cloze procedure “could aid the teacher in determining the appropriate instructional reading level …and the level of material that would be frustrating for children to read” (65).

Extensive review of research coupled with quantitative research involving more than 1,000 subjects led O’Toole and King (2010) to conclude that the cloze procedure provides a useful estimate of the “accessibility of a particular text for a particular group of readers” (p. 305). A strength of the cloze procedure is ease of construction based directly on reading materials that individuals are expected to read, usually in academic settings. In addition, cloze measures are objective and not influenced by extraneous factors such as the competence of test constructors. Analysis of research on cloze suggests that the cloze procedure is a valid measure of text difficulty. There are several sets of criteria for determining reading level based on completion of cloze passages. All of the criteria are close in estimating reading levels. The authors determined that the criteria determined by Ransom (1970) for determining reading level, though based on data gathered in the early 1970s, are still valid:

1. Independent Level: 50% or more correct replacements
2. Instructional Level: 30% to 49% correct replacements
3. Probable Frustration Level: 20% to 29% correct
4. Frustration Level: Below 20% correct
Text Complexity

Readability formulas have existed for years (Klare, 1984), but the debate about the readability formula that accurately predicts a reader’s ability to comprehend a text still exists (Benjamin, 2012). Despite this, CCSS urge teachers to use increasingly complex texts with all readers (National Governors Association, 2010). This emphasis on text complexity is based on research that shows students who perform well on ACT questions from complex texts are more likely to experience success in college (ACT, 2006). CCSS present three factors to measure text complexity: quantitative evaluation of the text, qualitative evaluation of the text, as well as matching readers to texts. Yet, the factor that has received the most attention is quantitative evaluations of text (Hiebert, 2012). Benjamin problematizes quantitative evaluations of text complexity for early grades because of the number of texts that students engage with over the course of a year and because the features of early grade texts have rarely been studied. Still yet, quantitative measures are widely used to measure text complexity.

Traditional efforts to measure text complexity have gained widespread use thanks in part to the prevalent naming of Lexiles throughout the CCSS. Traditional calculations, such as Lexiles, use sentence length, word length, and word frequency (Chall & Dale, 1995; Smith et al., 1989; School Renaissance Inst., Inc. 2000) to measure text complexity. The corpus of data on which researchers base these calculations suggests that word frequency is an established indicator of how well readers are able to comprehend texts (Just & Carpenter, 1980).

Lexile Framework

The Lexile Framework was developed by Smith and his colleagues (1989) as a developmental scale to monitor how well readers comprehend texts over time. The company uses passages of text known as “slices” over and over to determine the average word frequency and average sentence length of an entire book. To reduce sampling error, Kamile (2004) reported that Metametrics, Inc., owner of the Lexile Framework, calculates their Lexile levels using a corpus of over 300 million words. These averages are used to derive the Lexile level for books. Students then take one of 25 tests linked to Lexile levels. Once students obtain their Lexile level from these tests, students may choose from about 141,847 leveled books (see Lexile web resource). The Lexile measure provides students the level at which he or she can successfully comprehend 75% of what was read (Smith, et al., 2009). A statement on the Lexile website states, “there is no direct correspondence between a specific Lexile measure and a specific grade level”. However, Metametrics, Inc., provides overlapping grade-band Lexile levels. Recently, Metametrics, Inc., established “stretch” grade bands in response to the CCSS call for students to grapple with complex texts (see Table 1).

<table>
<thead>
<tr>
<th>Grade Band</th>
<th>Current Lexile Band</th>
<th>“Stretch” Lexile Band*</th>
</tr>
</thead>
<tbody>
<tr>
<td>K–1</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2–3</td>
<td>450L–725L</td>
<td>420L–820L</td>
</tr>
<tr>
<td>4–5</td>
<td>645L–845L</td>
<td>740L–1010L</td>
</tr>
<tr>
<td>6–8</td>
<td>860L–1010L</td>
<td>925L–1185L</td>
</tr>
<tr>
<td>9-10</td>
<td>960L–1115L</td>
<td>1050L–1335L</td>
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Method & Data Collection

This study was undertaken to determine the reading difficulty level of the Constitution for pre-service elementary teachers in a large, public university in the southeastern United States. All of the students were determined to be capable readers based on ACT reading scores and had completed at least two years of college level work satisfactorily with selective admission into the teacher education program. The participants were all elementary education majors planning to earn teaching licensure in grades K-6.
This study began in the fall semester of 2011 and continued on through the Spring semester of 2013. One hundred and fifty-one participants engaged in the Constitution cloze study. Participants were elementary pre-service teachers enrolled in several reading and social studies methods courses. Participants were provided with instruction in completing a practice cloze measure during class time prior to the administration of the cloze measure on the Constitution. Providing instruction in completing a cloze measure is important since students usually expect to be highly successful when completing a test. In other words, they can expect to encounter items that are very difficult given the structure of a cloze measure.

Participants were advised that the purpose of the measure was to estimate the difficulty of reading the Constitution and such information would be helpful to their own development as reading and social studies teachers and for others interested in the teaching of civics. In addition, they were advised that they would in no way be identified or evaluated on their performance. Participants were given the option to decline participation however, all students elected to participate.

As stated above, participants were given a practice cloze measure based on a children’s story to familiarize them to the process. Next, students were provided a cloze measure (text and answer sheet) for Article 2, Section 1 of the United States Constitution. Participants were given one 50-minute class period to complete the 50 item cloze measure. Most participants spent less than twenty-five minutes on the completion of the measure. Raw scores were determined and percent correct tabulated and noted based on students’ score at the frustrational, probable frustration, instructional, and independent levels.

### Results and Conclusions

Based on the Microsoft Word Review function, the Flesch-Kincaid Grade Level of Article 2, Section 1 of the US Constitution is 14.1. This means that this text would be equivalent to a text used in the first month of the 14th grade, or as a college sophomore. Using the Lexile Analyzer, a software program freely accessible to the public on the Lexile website, this material has a mean sentence length of 24.45, a mean log word frequency of 3.63, and a word count of 269, placing the Lexile level at 1290L. This 1290L placement falls above the 11th grade and College and Career Ready band of 1070L-1220L, but within the CCSS suggested 11th and 12th grade “stretch” band of 1185L – 1385L. This affirms our findings that this text would be difficult for college sophomores. Indeed, college sophomores experienced difficulty with this text.

<table>
<thead>
<tr>
<th>Level</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frustration 20% or less correct</td>
<td>4</td>
</tr>
<tr>
<td>Probable Frustration 20 - 29% correct</td>
<td>27</td>
</tr>
<tr>
<td>Instructional 30 - 49% correct</td>
<td>105</td>
</tr>
<tr>
<td>Independent greater than 50% correct</td>
<td>15</td>
</tr>
</tbody>
</table>

n = 151

Overwhelmingly the data suggests that the readability of pre-service elementary teachers of the Constitution is at the Probable Frustration Level leaning towards the Instructional Level, 87% of the raw scores fall into the two levels (see Table 2). Participants generally had a tough
time completing the cloze measurement and struggled greatly with readability of the passage. These findings have implications for both reading education and social studies education. In terms of reading education, questions remain about how to determine the complexity of a text and how teachers will find the time to qualitatively level texts. For social studies education, questions remain about how these changes will impact the continued marginalization of social studies and civic education in their future classrooms.

*How to determine the complexity of a text?*

Quantitative analysis of texts is easy to retrieve, but it is prudent that teachers make decisions about text complexity using multiple measures. Just as there is no one way to help struggling readers, there is not one method to adequately measure the complexity of a text (Bailin & Grafstein, 2001). Quantitative analyses fail to measure the qualitative nature of the text or the special understanding that teachers hold regarding their students. Benjamin notes (2012), “selecting appropriate texts for a population of readers requires some understanding of both the reader and the text, and different methods may be more or less appropriate for different types of texts and different populations of readers” (p. 64). It is not by chance that the authors of this article chose Section 2, Article 1 of the US Constitution. Our study confirmed our beliefs that Section 2, Article 1 of the US Constitution is a difficult text. This is despite the fact that the majority of the words in this text fall within the first 1000 words of Fry’s Instant Words (Fry, 1999), a list often used by teachers, students, parents, and publishers of children’s texts to create curriculum materials and “readable” texts. Almost all text-leveling formulas rely on vocabulary and syntax in their calculations (Hiebert, 2013). To calculate vocabulary, computer programs compare the words in the text to a corpus of words that occur frequently in texts. The mean sentence length of our text example was calculated at 24.45 indicating a high degree of complexity, but still within the capabilities of college sophomores. Yet, this text proves to be more complex than what the readability level indicates due to the historical syntax, syntax largely unfamiliar to this group of students. Indeed, using 46,000 responses on 252 non-publicly available assessment tasks, White (2012) found that “particular text features (e.g., long sentences), for example, are not always easy or difficult in and of themselves; rather their influence on literacy tasks depends on the context in which they appear; their interface with the cognitive and linguistic demands of the task, and accordingly, with the required readers’ skills” (p. 161). Thus, if teachers are to make informed decisions about complex texts, they need time to critically examine texts for the cognitive and linguistic demands of the task in light of knowledge about their students’ skills.

*Finding Time to Examine Texts*

While CCSS provides specific guidance on choosing texts using quantitative methods, their Appendix A (Student Achievement Partners, 2012, p. 6) offers general guidance about how to select texts using qualitative methods or how teachers should take the reader and task into consideration. The CCSS authors do suggest that the qualitative and text/reader considerations require human readers, but fail to name teachers as the qualified individuals capable of making decisions about the quality of texts used in their classrooms. Instead, CCSS authors state that qualitative decision making “involves making an informed decision about the difficulty of a text in terms of one or more factors discernible to a human reader applying trained judgment to the task” (p. 5). The measures suggested are vague at best, presenting anchor criteria for the following factors: 1.) levels of meaning and purpose; 2.) structure; 3.) language conventionality and clarity; 4.) knowledge demands: life experiences, cultural/literary knowledge, or content discipline knowledge.
Recently, Hiebert (2013) established a simplified four-step process for teachers to consider when choosing texts that will challenge, but not frustrate readers. This four-step process known as the Text Complexity Multiple-Index (TCMI) calls for teachers to:

1. Check the Lexile level with other leveling systems such as guided reading levels (Fountas & Pinnell, 2010). Using these methods, teachers should make note of the vocabulary as well as the length of sentences in the text.

2. Compare texts to benchmark texts, including those exemplar texts listed as exemplar texts by CCSS.

3. Engage colleagues in discussions using qualitative rubrics such as those suggested in their Appendix A (Student Achievement Partners, 2012, p. 6).

4. Consider readers’ background knowledge, the learning task involved, and the context in which the learning task should occur.

Using this four-step process to analyze Article 2, Section 1 of the US Constitution, the authors made the following determinations about the text used in this research:

1. Text Levels: The Lexile Level of this text calculated to 1290L, the Flesch-Kincaid Grade Level calculated to 14.1. Thus, there is a difference at least a 1 to 2 year grade level difference between these two leveling methods. Yet, they both indicate that this text is difficult.

2. Benchmark Text Comparisons: The exemplar texts at the 11th and CCR band are as follows, along with their Lexile levels:

   - Common Sense by Thomas Paine (1776) – 1330L
   - Walden by Henry David Thoreau (1854) – 1200L
   - “Society and Solitude” by Ralph Waldo Emerson (1857) – unknown on Lexile website
   - “The Fallacy of Success” by G. K. Chesterton (1909) – unknown on Lexile website
   - Black Boy by Richard Wright (1945) – 950L
   - “Politics and the English Language” by George Orwell (1946) – unknown on Lexile website

3. Qualitative Rubric: The authors used the qualitative rubric in Appendix A of the CCSS, to analyze Article 2, Section 1:

   - **Levels of Meaning:** The purpose of the document is explicitly stated, to lay out how the states would elect a president.
   - **Structure:** The writing is specific to the discipline of History, but this is the only point that can be addressed in this category.
   - **Language Conventionality and Clarity:** The language is archaic and otherwise unfamiliar and specific to the domain of History.
   - **Knowledge Demands:** Content/Discipline Knowledge (chiefly informational texts): To understand Article 2, Section 1, readers need to have familiarity with the role of Senators, the House of Representatives, and electors in the voting process.

4. The students in our classes demonstrate capability to read complex texts, but report a lack of recreational reading. Troubling as it is, some professors speculate that these same students fail to read class assignments. Thus, we felt that these students would experience difficulty with this text due to the historical nature of the text.

   We noted that only by completing a qualitative analysis of the text were we able to determine what instructional practices teachers...
might need to scaffold student learning of this document. Yet given the sheer volume of books read by elementary students, we fear the daunting task of qualitative analysis of text complexity for each document will further marginalize social studies instruction in the elementary grades from both the teacher’s perspectives as well as the challenges faced by the students.

Continued marginalization of social studies and active civic education

Levstik (2008) states that the impact of testing and mandates on social studies teachers are stark. As a result, elementary social studies education has taken a far backseat to the tested subject areas of reading and mathematics. Integrated instruction attempts face challenges as well. Levstik (2008) indicated that teachers will either be hindered by their inability to plan quality integrated instruction or that the surface level claims of integrated instruction will continue to mask the real reduction in the time given to social studies education (p. 53).

With token time given to social studies education and civic education, K-12 students miss out on a vital and critical understanding about our world and the people in it. We fear that students will continue to grow into adulthood without the civic values and skills needed to contribute to society in a meaningful way. Certainly their ability to read and analyze primary source documents will be impacted.

However, we do feel that here lays an important limitation of the CCSS push for more work with historical documents. Reisman and Wineburg (2012) seem to concur when considering the usage of President Polk’s 1846 message to Congress and the CCSS definition of text complexity:

A thorny instructional dilemma emerges from this definition: on one hand, students should engage with complex texts that broaden their linguistic repertoire; on the other hand, they should engage with texts in ways that are rigorous and intellectually meaningful. If they devote all their mental resources to assembling a basic understanding of the proposition in the text (what van Dijk & Kintsch, 1983, call a “textbase model”), they have few resources remaining to interpret or analyze what the author is actually saying and how it relates to what they already know (what the same researchers call a “situation model”). (p. 25)

While we strongly support the inclusion of using these primary source documents, we have many questions about how the mere “grappling” with very complicated text informs a cogent understanding of the meaning of a text. Teachers struggle with these texts, as they did in our study, and we suspect their students will as well, minus additional support. Without other thoughtful and dynamic social studies experiences (active learning, simulations, role play, problem-solving, project creation) analyzing a collection of static documents, devoid of context seems like a poor use of time. An examination of pre-service teachers’ reading of the Constitution helps us to see future research possibilities at the intersection of CCSS, text complexity, and best practices using primary source documents.

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