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Close examinations of texts by online learning communities through the Final Word protocol

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Close Examinations of Texts by Online Learning Communities Through The Final Word

Protocol

by

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Abstract

This study documents a potential approach to rich discussions around complex texts by using a combination of protocols and synchronous technologies. The shortcomings of both online text discussion technologies and protocols can be overcome by using best practices from both approaches. The included professional materials include a series of documents, guidelines, and instructional screencasts that will illustrate the implementation of the Final Word protocol using the technologies of *Google Docs* and the iPad app *Subtext*. Finally, the study discusses potential applications of this approach for leadership contexts both in K-12 education and higher education. The approach detailed in this study combines the best of new collaboration technologies with proven approaches to group collaboration coming from the rich tradition of protocol development.

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Rationale

In my experiences as both a student and a teacher, the most productive and rewarding discussions I've experienced are firmly rooted in a text and include a wide diversity of opinions and perspectives. Discussions rooted in a text are less likely to stray in unproductive directions. Participants are forced to ground their arguments in specific materials or ideas present in the text. Also, by experiencing a wide range of opinions and perspectives, a participant learns about others' ideas and also clarifies his or her own thinking. Successfully implementing a discussion in a classroom that uses these two techniques is difficult. It might be considered even more difficult to replicate the classroom experience in online learning environments.

I have used online learning environments as a teacher both of pre-adolescents and graduate students. In both of these contexts, I've struggled with how to use online tools to enrich conversations around complex texts.

With my 6th grade students, I've used discussion forums and tools such as *Google Docs* to examine texts. For example, with my science students I posted a complicated reading online as a Google Doc and invited students to select words that they didn't understand and comment on them. Then other students could reply to that student's comment to address their question. In another case, I posted a reading about student experiences of middle school dances. I asked students to highlight portions of the text and raise questions to classmates about how similar or dissimilar the experience in the text was to their own personal experience. In both of these cases, I was satisfied with the use of the tools on a superficial level. However, neither of these examples led to the kind of rich back-and-forth discussions that I have experienced in my classroom.

I also recently taught a graduate level class in using technology as a school leader. This course had a number of challenging texts and my students came from a wide variety of backgrounds and experiences. The primary tool for discussions in the course was an online bulletin board. Each week, I would set up a discussion thread for each reading and ask students to share their thoughts and perspectives on the reading. The discussions succeeded in some senses. Each student was expected to contribute each week, so a wide variety of perspectives were shared. Students also were able to read peers' ideas and take time to respond. However, I still didn't feel like discussions were as lively as a good classroom discussion. In some cases, discussions petered out, with some student's questions going unanswered or unaddressed. In other cases, predictions or inferences were made that weren't based on textual evidence or clues (Oczkus, 2003, p. 21).

From my perspective, the most productive discussion in the course came through an exercise of having students select specific texts from a larger reading and then share why they felt that particular selection was interesting to them. These selections were put into a Google Doc accessible to the entire class. Then, in the following week, students were able to comment on each other's selections and thoughts. This led to some zesty interchanges amongst students that were firmly rooted in two texts: the selection from the reading and the original posters' response.

In both my 6th grade class and my graduate school class, I am always looking for ways to have the richest possible discussions, whether offline or online. My experiences led me to explore in two different areas. First, I wanted to learn about protocols for having rich discussions. Second, I wanted to explore available tools for having discussions around a text. These explorations led me to discover a protocol called "Final

Word” that I feel is both flexible and powerful for group discussions (see Appendix A for the detailed protocol). I also built upon my existing knowledge of *Google Docs* as a tool for discussing text. In addition, I discovered an iPad app called *Subtext* that is built for the express purpose of social discussions around texts.

As a result of these explorations, I have created an approach that facilitates online discussions that can be equally as rich as classroom discussions. In some cases, the use of this approach might lead to discussions that are more firmly grounded in the text and which give more opportunities for the sharing of diverse opinions and perspectives. This approach is based on using synchronous online technologies in combination with the discussion protocol “Final Word”. The combination of these two tools allows for rich discussions around complex texts in an online environment.

In my argument for this approach I will first examine the importance of discussion and social learning in the classroom. Second, I will examine the development of tools for interacting with and discussing texts. Third, I explore the development of protocols that enrich discussion. Fourth, I will examine the developmental aspects of this approach as well as the sociocultural implications. Lastly, I will illustrate how the combination of new technologies with protocols addresses critiques of existing approaches.

Discussion and Social Interactions as Tools for Learning

One of the underlying assumptions of this study is that discussion is a useful and productive tool for examining texts in the classroom. To examine that assumption, it’s useful to have an understanding of what we mean by discussion. Brookfield and Preskill (2012) define discussion as “the disciplined and focused exploration of mutual concerns

but with no end point predetermined in advance”. This definition covers situations in the classroom but also other types of conversations that can happen across distances and times.

The main type of discussion we are interested in is discussion in a social context. Learning is fundamentally based on the social experience, allowing for a sharing of ideas, perspectives and even metacognitive elements involved in interpreting a text. McDonald, Mohn, Dichter and McDonald feel that the relationship is so fundamental that one cannot exist without the other.

Learning is Social. We inevitably learn through and with others, even though what is finally understood is our own mental construction... Openness to others' experiences builds openness to others' perspectives, and such openness provides learning opportunities otherwise unavailable. (McDonald, Mohr, Dichter, & McDonald, 2003, p. 23)

Oczkus agrees, sharing that comprehension is deepened through social interactions, allowing metacognition to be made public. (Oczkus, 2003, p. 23) Chapin adds an additional perspective from the experience of math problems as a text. She discusses how dialogues provide direct access to ideas, relationships among ideas, strategies, procedures, facts and mathematical history (Chapin, 2009, p. 6). Let's examine some of these benefits in turn, examining how discussion helps in the process of metacognition, text-to-self connections, and text-to-text connections.

When readers share with each other their experience of reading and their grappling with the text, they build their metacognitive skills. This occurs partly through the generation and sharing of probing questions. Harvey and Goudvis discuss the critical

importance of questioning to building understanding in their works on reading comprehension strategies.

Questions are the master key to understanding. Questions clarify confusion.

Questions stimulate research efforts. Questions propel us forward and take us deeper into reading. When our students ask questions and search for answers, we know that they are monitoring comprehension and interacting with the text to construct meaning, which is exactly what we hope for in developing readers.”

(Harvey & Goudvis, 2007, p. 109)

In efforts to answer those questions, readers in a discussion must understand others' questions and offer evidence to back up their arguments. Chapin shares how discussion plays a critical part in helping students improve their ability to reason logically by asking for evidence to support claims (Chapin, 2009, p. 7). This combination of shared questioning and shared claims with evidence produces achievement gains across the curriculum (Brookfield & Preskill, 2012). Students can develop metacognitive skills to help them engage with texts in a meaningful way.

In addition to developing metacognition, readers develop the ability to make connections between text and their own experiences through social discussion.

According to Brookfield and Preskill, the process of sharing experiences tied to a text in discussion validates their own experience.

As children read more widely, they're amazed that: "The same thing's happened to me!" What hooks us on books is the realization that in reading about others, we learn about ourselves.” (Taberski, 2000, p. 167)

Similarly, readers can read nonfiction texts and make connections to previous experiences and understandings. This ability to make text-to-self connections can be developed and strengthened through social discussion.

Readers also develop the ability to make connections between texts through discussions. First, having a large number of readers increases the collective experience with texts. This allows for more possible connections. Also, readers can share their tentative connections in a social context, allowing them to evaluate the usefulness and relevance of the connection. This process of connecting can produce additional critical insights into texts.

As children read more widely, they begin to note similarities between books.

This involves a different kind of thinking than when their reflections are confined to one text. They have to recognize analogies in structure, style and theme.

(Taberski, 2000, p. 172)

By sharing these commonalities between texts, readers develop a conceptual toolbox that allows them to grapple with more complex texts and reach a further level of understanding.

The process of social discussion of texts can greatly enhance the understanding of texts. It develops metacognitive skills and enriches the processes of making connections between the text and the reader as well as connections between the text and other texts.

Now we begin to discover technological tools that have developed over time for discussing texts.

The Development of Technological Tools for Discussing Texts

One of the first tools for interacting with text was the written word. The tool of writing changed the process of telling from an oral, mutable affair into an artifact. It froze text into a stable form that persisted. The meaning of the text could still shift, grow and change, but the text itself was fixed. And this was true of other forms of media. Recording technology captured a piece of music. Film captured a fleeting image. The capture and fixation of information is a key step in beginning to discuss it.

It is worth noting that often the first discussion that happens around a text is the reader's internal discussion regarding the text. There exists a long history of readers interacting with texts through the use of marginalia. These interactions with the text take the form of "reader modifications including marginal notes, underlining, highlighting, and dog-earring (Wagstaff, 2012, p. 2). These reader-generated landmarks in a text help the reader begin an internal discussion around the text. Marginalia often involve areas of interest, questions for further discussion and connections to personal life experience or other texts.

Marginalia was also a tool for discussions between readers. In some cases, the commentary was almost more important than the text itself. Some books were even "interleaved", either by readers themselves or by authors, to encourage commentary with the text. (Wagstaff, 2012)

In the 19th and early 20th centuries readers commonly filled a favorite book with marginal comments before gifting it to a friend because, Jackson noted, "reading was more often than not a social activity" (Jackson, 2001, p. 65). These comments often alternated between objective commentary on the book and personal

comments directed at the recipient. Coleridge even marked up multiple copies of the same book in different ways (e.g., personal use, critical commentary, and editing for publication). Sometimes the recipient would augment the book with additional comments and then return it to the original owner. This kind of shared, social reading seems to have faded out in the 20th century. (Wagstaff, 2012, p. 4)

So the technology of text itself allowed for discussions of texts, both for the reader and his social community. With the gradual disappearance of the tool of marginalia, however, other tools presented themselves.

The advent of online communication, especially the advent of the Internet, allowed tremendous growth in terms of both availability of texts and the means by which to discuss texts. The amount of texts, of whatever form, online, only a click away, frankly beggars the imagination. In addition, other forms of availability and access increased. Readers could change text to have large type, or even have the computer read aloud text. And as these texts become more available and accessible, the means to discuss the texts with others has also exploded. Not only can one have a conversation with a global audience, but also in many cases that conversation is often instantaneous. The advent of discussion boards or forums co-evolved with the growth of the Internet. From the very beginning, the technology was used as a way of engaging in social discussion and debate. And often these discussions were around texts: books, movies, music, photos, or video games. Whether on discussion boards, instant messaging chats, product reviews or pop culture fan sites, consumers of Internet texts were eager to share their thoughts and ideas with each other.

With the advent of online readers such as the Amazon Kindle, there was even a resurgence in the production and sharing of marginalia. From the very first iteration of this technology, tools were provided to allow the reader to highlight, underline or comment on the text. In Amazon's case, they even offered a "Popular Highlights" feature that allowed a reader to see which passages a large number of other readers found interesting.

Another interesting development has been the creation of real-time tools for interacting with a text. *Google Docs*, launched in February 2007, had tools available from the very beginning that allowed multiple people to interact with the same text. Writing, editing and revising could all happen with multiple people working on the same text. In the past few years, Google has made iterations to their Docs product allowing for rich threaded discussions around a text. In the past year, a new iPad app, *Subtext*, was explicitly designed to support group reading of a text. *Subtext* uses the idea of marginalia and makes it fully social, allowing all readers to see each other's highlights, underlines and comments. This tool fulfills the promise of the early uses of marginalia but allows for instantaneous feedback with a potentially geographically disparate readership. In addition, there is essentially a "limitless" margin and discussions can turn into lengthy conversations, not limited by the space available on a printed page.

Regardless of the technologies employed, readers have always used whatever tools are at hand to interact with text and to share thoughts, ideas and questions with other readers. But powerful tools do not always guarantee a rich discussion. Any casual exploration of an Internet message board will reveal that they are anything but rich. The

next section of this study will discuss the development of protocols as a tool for providing structure to discussions, and producing a richer experience.

The Development of Protocols

The act of discussion can lead to unexpected insights, clarified ideas and new passions. In some cases, however, discussion can just as likely lead to squelched ideas, hurt feelings and other negative outcomes. What makes for a successful discussion and why do some discussions fail? Brookfield and Preskill identify a number of contributing factors: unrealistic expectations, unprepared students, lack of ground rules, askew reward systems and a lack of teacher modeling (Brookfield & Preskill, 2012). In *The Power of Protocols*, the authors discuss how “in most open discussion, some students dominate, others retreat into silence, and important viewpoints are invariably lost or undervalued” (McDonald et al., 2003, p. 35). How can facilitators of discussions around text help to foster a healthy discourse? In the early 1990s, a group of school reformers started to develop protocols, defined as “prearranged constraints designed to sharpen communication, enhance collective thinking and build knowledge” (Zydney & Dichter, 2012). Protocols help to reinforce key aspects of facilitating discussion. First, they often focus on the key role of questioning. Second, they make explicit the structures and expectations of the discussion. Lastly, they emphasize the importance of the social aspects of discussion and the responsibility that each participant has to the larger group.

Questioning is often the starting point of any discussion around the text. These questions can take different forms with different social and cognitive demands. Harvey and Goudvis discuss the idea of thick and thin questions, for example. Thick questions require further discussion and research. Thin questions tend to have more

straightforward answers such as clarifications around vocabulary (Harvey & Goudvis, 2007, p. 116). A healthy discussion of a text will contain both types of questions, but richer discussions require thick questions. Oczkus, in his work on reciprocal teaching, discusses how the nature of questioning can address various comprehension goals such as prediction, questioning, clarifying and summarizing (Oczkus, 2003, p. 14). Most protocols leave the nature of the questioning up to the facilitator and participants. This allows for maximum flexibility based on the goals of the discussion. In addition, by having participants choose questions and topics, protocols can increase personal and social engagement with the text. Daniels writes about how “ownership makes a big difference: this way the students are in charge of their thinking and discussion” (Daniels, 2002, p. 22). Protocols emphasize the importance of questioning but provide facilitators and participants great freedom in the types of questions driving the discussion. But questions are only the first part of a discussion. It’s also important to have a healthy interplay of ideas around those questions.

Protocols help to make explicit the underlying assumptions and expectations of a discussion. In *The Power of Protocols*, the authors share their thoughts on the simple importance of this approach.

Protocols force transparency. By specifying, for example, who speaks when and who listens when, protocols segment elements of a conversation whose boundaries otherwise blur. They make clear the crucial differences between talking and listening, between describing and judging, or between proposing and giving feedback. In the process, they call attention to the role and value of each

these in learning, and make the steps of our learning visible and replicable.”

(McDonald et al., 2003, p. 5)

Most discussions involve the elements mentioned above. But by using protocols, it's clear to all participants what particular role they should take at any time. In addition, the nature of a participant's discourse is also made explicit. But a key element of any discussion, and another focus of protocols, is the importance of the social aspect.

Whether in the classroom, a book club, or online, discussions depend on a type of social contract between all of the participants. Gallagher, for example, writes about the importance of providing a social service when participating in online discussion forums (Gallagher, 2006, p. 17). Participants have a responsibility to “keep the conversation going” (p. 5). So when reading a fellow reader's post, another participant should both respond to the post and extend it with another question or insight. He speaks of the idea of discussion as a racquetball game, where each participant is keeping the conversational ball moving. Another element of the social contract of discussion that is reinforced by protocols is the value of understanding the wide variety of views in a discussion.

“Until a professional community really knows and understands the range of viewpoints it contains – however variable and contradictory – it remains incapable of taking collective and effective action on behalf of all its students' learning. That is because it ends up screening out – for the sake of its own false consensus- exactly the differences it needs to consider. (McDonald et al., 2003, p. 17)

The social context of the group produces a better understanding of or larger platform for the text. The group does this through the wide variety of experiences and viewpoints

contained within the members of the group. The social contract of a discussion must value that diversity. Protocols help to emphasize and reinforce diversity of opinions by giving space to each voice.

This study has shown how protocols in general help to emphasize question, clarify conversational roles and enforce the social contract of discussion. A particular example of an effective protocol that illustrates these techniques is the “Final Word” protocol. This is a versatile protocol originally developed by Daniel Baron and Patricia Averette for the National School Reform Faculty (Fischer-Mueller & Thompson-Grove, n.d.).

The purpose of the Final Word Protocol is to expand the interpretation of one or more texts by encouraging the emergence of a variety of interests, viewpoints and voices. By forcing everyone to offer an interpretation, and to listen closely to and reflect back others’ interpretations, Final Word ensures the emergence of diverse perspectives on texts. It also helps participants feel safer in posing what may be offbeat or dissident interpretations because the protocol implicitly avoids consensus-building. (McDonald et al., 2003, p. 35)

This protocol has a number of strengths in terms of discussing texts. First, it’s flexible enough that it could be used with a variety of text. This study focuses on written text, but this protocol could just as easily be used to discuss visual art, music or film. Second, as discussed above, it highly values disparate points of view. Third, it firmly grounds discussions in the text itself. The protocol begins with the selection of an excerpt or focal point in the text, and each participant in the discussion has to respond to that excerpt. By beginning with the text, emphasizing questioning, and then valuing disparate viewpoints

and experiences, the Final Word Protocol gives a productive structure for discussions around complex texts (see Appendix A for full description of the protocol).

Developmental and Sociocultural Perspective

Developmental Perspective

This study has indicated the value of social discussions in interpreting texts, examined technologies for discussing texts, and shared the development of protocols as a tool for structuring social discussion. But any implementation of social discussion of text in a group has to be based on an understanding of developmental issues and sociocultural issues. This discussion is based around the context of a classroom of sixth graders in an urban independent school. However, many of the same points apply to adult development situations, such as my work with graduate students in an educational leadership program. The techniques that have been discussed are developmentally appropriate and have interesting sociocultural implications for both of these groups.

Children in early adolescence are developmentally ready for rich discussions around text in a social context. At this age, children show an “increased ability to de-center and see the world from various perspectives” (Wood, 2007, p. 125). In addition, they “can and will see both sides to an argument” (Wood, 2007, p. 139). Not only are they capable of understanding others’ ideas, but also children’s collaboration will help to increase understanding. Learning in a social context “can help peers significantly with subject matter” (Wood, 2007, p. 141). Vygotsky also wrote about how “less knowledgeable peers benefit from working with more knowledgeable peers.” (Borges, 2009, p. 6) Developmentally speaking, students are more engaged in the social world of

the classroom and are particularly ready for a more rules-based approach, such as in the discussion strategies based on protocols.

The rules of a protocol-based discussion seem to be quite appropriate for students in middle childhood. During this age, there is increased evidence of rules-based games and activities. In addition, children are gaining experience in balancing their own desires against the rules of society (Cole, Cole, & Lightfoot, 2005, p. 570). The rules of a protocol make explicit the expectations of the small society of a classroom discussion. By making those rules clear, students may be better able to understand the balance between their needs and the larger needs of the classroom community. Also, since most questioning in protocols comes from the students themselves, most learning stays firmly within the zone of proximal development (Vygotskiĭ, 2012).

This protocol is also appropriate for use with adults both in terms of cognitive development and in the opportunities the protocol provides for asking probing and difficult questions. Merriam and Clarke discuss how “a common factor in some models of adult cognitive development is the centrality of contextual knowledge and the importance of constructing one’s own knowledge” (Merriam & Clark, 2006, p. 32). Context can be established through discussion around the text that allows learners to share their own background knowledge about the material. In addition, the open-ended nature of the protocol allows adult students to present possible theories, and then modify those theories based on responses from the group. This process allows the adult learner to construct his or her own knowledge. On another note, this protocol allows the adult learner opportunities to practice Peavey’s “strategic questioning” (2003). Since the action of the protocol is based upon student-generated questions, the adult learner can

gain experience with presenting different types of framing questions, and observe the different responses those questions generate. The adult learner can explore the concept of questioning as a “basic tool for rebellion ... that breaks open the stagnant and hardened shells of the present, revealing ambiguity and opening up fresh options to be explored” (Peavey, 2003, p. 170). Both in terms of cognitive and social development, the “Final Word” protocol appears to be appropriate and beneficial to adult learners.

Overall, children in middle childhood are gaining skills in social interactions, understanding others’ perspectives and balancing their needs with the needs of the groups through rules and expectations. In addition, adult learners as well are constructing knowledge and using questioning as a device for learning and understanding. All of these qualities are extremely important to social discussions of text. The act of discussing texts allows children and adults opportunities to exercise these qualities.

Sociocultural Perspective

The use of protocols to facilitate social discussion of text has a number of sociocultural implications. First, it allows marginalized voices to be heard. Second, by making the implicit explicit, it empowers students to participate in a culture of power. Lastly, the nature of protocols such as “Final Word” allows students to raise more controversial topics and issues that might be considered taboo in a traditional conversation.

One of the foundations of protocols is the importance of hearing all voices. In more free-form discussions, there are often only a few voices heard in the classroom. Implicit biases of the teacher might lead to certain students being called on more than others.

Discussion leaders whether they are teachers or students, show whose opinions they value by inviting only certain people to participate and listening and responding with varying degrees of respect. If the leader rarely asks for a particular participant to share ideas or rarely find those ideas interesting or important when they are shared, that participant is marginalized.”(Spiegel, 2005, p. 89)

In protocols such as “Final Word”, participation is built into the process and each member of the group must contribute. In addition, the authority for commenting on others’ ideas is often shared, or in some cases nearly absent. In the “Final Word” protocol, whichever person framed the original question is the same person who incorporates the ideas of others, and each person in the group takes on this role at some point. By moving the focus away from the leader of the discussion or the more dominant members of the group, protocols help to allow for all voices to be heard.

Protocols also allow the power dynamics of a discussion to be more transparent. Expectations about who poses a question, who responds to questions and who summarizes a discussion are all made explicit in the protocol. With the use of protocols, marginalized students could benefit because “if you are not already a participant in the culture of power, being told explicitly the rules of that culture makes acquiring power easier” (Delpit, 1988, p. 283). In some cases, being unaware of the cultural or procedural norms of a lesson might lead to a participant being thought of as having a disability by operating outside of a norm. (Baynton, 2003) Similarly, discourse expectations also reinforce the “old boy” network where communication styles are constructed and limited to racially or sexually exclusive groups (U. S. Commission on Civil Rights, 2003). By

making the implicit explicit, protocols help marginalized groups to take part in discussions around texts.

Protocols also can give space for participants to raise more controversial questions and topics. To truly dive into a text, participants must feel safe enough to ask and address the “unaskable questions” which more polite, unstructured discourse might avoid (Peavey, 2003, p. 169). For example, the nature of the “Final Word” protocol does not allow other participants to avoid or criticize a question posed by another student. A protocol such as “Final Word” would be a powerful tool for “talking back to texts” and uncovering bias in textbooks (Bigelow & Peterson, 2007, p. 116). Protocols also allow for a controlled flow of controversial discussion, since “when there is an opening ... years of anger and pain surface (Christensen, 2007, p. 48). By providing structure and clear expectations, protocols allow for safer exploration of more charged topics in social discussions of text.

This study has discussed how the greater transparency of protocols has a number of advantages. Voices are less likely to be marginalized. All participants understand the nature of the discussion and begin to enter into the “culture of power.” And protocols allow for more provocative questions and material.

How This Approach Addresses Critiques of Existing Approaches

The approach laid out by the professional development materials of this study addresses some of the common critiques of existing approaches to discussion. Simply put, by combining the power of real-time commenting technologies with the pedagogical sophistication of protocols, groups can have better discussions around texts. As

mentioned previously, this paper focuses on the discussion of written texts, but could easily be adapted to other types of texts. First, I will show how protocols add a pedagogical structure to online tools. Second, I will detail the advantages to using *Google Docs* and the iPad app *Subtext*. Lastly, I will discuss the potential advantages of also using this approach in face-to-face classrooms.

Online technologies that allow for real-time communication and collaboration are extremely powerful tools for discussions. However, these tools provide little in terms of pedagogical structure to help sustain discussion. The open nature of the typical online discussion forum can often lead to conversations that are hard to maintain and that lack productive discourse (Gallagher, 2006). Similarly, some protocols, although effective in face-to-face settings, can be difficult to migrate online without significant modifications.

The approach in this study uses the “Final Word” protocol as the pedagogical structure for an online discussion of text and then implements the protocol using two tools: *Google Docs* and the iPad app *Subtext*. The protocol was chosen because it is highly flexible. It can be used with writing-based texts but could easily be adapted for other media. All that’s needed is for the reader to be able to highlight a section of the text that is of interest to them and pose a question to the group around that highlight. In addition, since the protocol is familiar to many educators, it might help to overcome institutional inertia or resistance to using new technologies (Zydney & Dichter, 2012, p. 41)

The technologies were chosen because they are real-time technologies. By real-time, I mean that each reader of the text is instantly updated when another reader makes a comment on the text. In *Going Online with Protocols*, the authors describe using a

discussion forum based approach. (Zydney & Dichter, 2012) However, there are a number of limitations to using a traditional threaded discussion forum. For example, there is no way to prevent students from accidentally choosing the same highlighted portion of text, because a discussion forum is not real-time. Readers also lost the context of the quoted section because it is cut and pasted out of the larger text. In the approach offered in this study, the experience of marginalia is preserved. Each conversation around the highlighted text happens in the text itself, allowing context to be preserved. Plus, by including the conversations in the text itself the entire conversation is in one place, rather than having reactions trapped in different threads on a discussion forum. In addition, both approaches could allow students to link to or embed multimedia responses or prompts to the discussion. So a student who had trouble expressing herself in writing could upload a link to an audio or video file where she shares her ideas. As discussed in the principles of Universal Design for Learning, allowing multiple modes of expression through technology can increase student engagement and learning (Rose & Meyer, 2002, p. 75). By using *Google Docs* and/or the iPad app *Subtext*, discussions are real-time, embedded in the text itself, and allow for multiple modes of expression through multimedia.

Although I imagine that most educators would want to use this approach mostly for online classes or assignments, there might be cases where it could be used in a face-to-face environment. For example, the entire back and forth of a conversation around the text is recorded in the document, whereas in a traditional “Final Word” protocol the conversation is ephemeral. In addition, as noted by Oczkus, some students have trouble concentrating in a noisy environment where there are multiple conversations going on at

once and this approach might offer a welcome respite (Oczkus, 2003, p. 20). This would also help to meet another principle of Universal Design for Learning by providing alternate means for both representing and expressing information (Rose & Meyer, 2002). Even though this approach is mostly designed for use in online courses and assignments, there are some compelling reasons for using it judiciously as part of a face-to-face classroom environment.

By using a compelling protocol and proven technologies, this approach addresses many of the complexities and challenges of having rich online discussions around text. In the next section, I detail how to implement this approach in a real-world context.

The Materials

The materials included in the appendices of this study provide an adapted version of the “Final Word” protocol and implementation details for *Google Docs* and the iPad app *Subtext*. K-12 teachers, higher-education instructors and educational leaders could use these materials for designing lesson activities, homework assignments or professional development sessions. This section of the study will briefly describe the materials in the appendices and then provide guidance on how to use the materials.

There are four documents in the appendices. The first document describes an adaptation of the “Final Word” protocol for use with *Google Docs* and *Subtext*. The second document gives instructions on how to set up a text for discussion in *Subtext*. The third document gives instruction on how to set up a text for discussion in *Google Docs*. The final document gives examples of different types of texts that might be appropriate for analysis using the “Final Word” protocol. Examples are given for early adolescent education, higher education and professional development. Many of these documents

include links to detailed video screencasts. The links are given in URL form and also in QR code form, which can be read by smartphones (See Appendix E for more information on how to use QR codes).

The protocol in the first document is adapted from the original by Daniel Barone and Patricia Averette. This version of the protocol could be used with either *Google Docs* and/or *Subtext*. The protocol is highly adaptable and could be used in K-12 settings, higher education or professional development scenarios. The protocol is focused on the analysis of written texts, but could be easily adapted for non-written texts such as art, photographs, videos or music.

The instructions contained in the second and third documents allow a facilitator to set up a text for Analysis using *Subtext* or *Google Docs*. The choice of which platform to use is up to the facilitator. Although *Subtext* is a free app, it may be difficult to ensure that all members of a discussion group have access to an iPad. *Google Docs* has the advantage of being a solution that can be used on a wide variety of devices. The disadvantage of *Google Docs* is that you need a constant Internet connection to use it, whereas with *Subtext*, a participant can still read and interact with texts offline and then sync up the discussion later when an Internet connection is available.

The final document gives examples of different texts that might be appropriate for analysis with the adapted “Final Word” protocol. These texts are grouped according to potential audience, either K-12, higher education or professional development.

Applications

In this section, I will suggest potential uses of this approach by teachers, professors and school leaders. In general, this approach works best with texts that make

heavy demands on readers or texts that are controversial or otherwise elicit provocative questions. First, I will discuss potential applications in a sixth grade classroom. Second, use of this approach in a graduate-school level class will be explored. Finally, I will discuss using this approach in a leadership context of collaborative decision-making at an independent school.

In my classroom, students are often asked to read texts that are challenging on different levels. In some cases, they are trying to learn new vocabulary and concepts. Sometimes, texts refer to historical concepts or events that some students might find unfamiliar. The use of the “Final Word” protocol could be used for at-home reading assignments to allow students to highlight areas of a text that they are having difficulty interpreting. Other students then could help that student address that difficulty. Another potential use could be discussion of different approaches to solving a math problem. For example, students could write up how they solved a common math problem and place those solutions into a common document. Then that document would become a text that the entire class would analyze. Students could highlight parts of solutions to ask clarifying question. Other times students might highlight similarities and differences in problem-solving techniques. By using the Final Word protocol as implemented through *Google Docs* or *Subtext*, students would be able to use each other as a resource for exploring and clarifying challenging texts.

I’m also planning to use this approach as part of a graduate-level online course that I teach on technology from a school leadership perspective. This class has a number of dense and vocabulary-rich texts. The course also deals with many complex issues

around privacy, equity and the relationship between technology and cognitive development. By using the “Final Word” protocol online, they can raise questions that are most relevant and alive to them. Also, in this case, there is often a wide range of experiences and viewpoints since most of the students are adults who have been working in education for many years. With this approach, the wealth of those experiences could be brought to the discussion more easily. Also, as mentioned earlier, this protocol often makes it easier to ask the “unaskable” questions that address particularly thorny issues. In the case of a graduate-level class, many of the applications are similar to a sixth-grade classroom with more emphasis on critical questions.

My school places a strong emphasis on shared decision making and consensus-building. As part of that process we often are asked to read texts and comment on them. However, we usually do such analysis of text only during scheduled face-to-face meeting times. If such analysis were done ahead of time in an online environment, it could enrich the eventual face-to-face discussion in a faculty meeting. An example of this would be in reading the Common Core standards. In the case of the math/science faculty, we have been using elements of the standards to modify and update our curriculum. In some cases, we have significant difficulties in interpreting the texts of the standards and their particular relevance to our setting. By using the “Final Word” protocol together with *Google Docs*, my colleagues could highlight sections of the standards that require clarification or ask for concrete examples of what that standard would look like when implemented in our particular setting. Another possible application could be a group reading of a professional development text. For example, this past summer faculty were invited to read Sal Vascallero’s *Out of the Classroom and Into the World*. Because of

time constraints in our faculty meeting schedule this year, we weren't able to discuss the text with each other. However, if we were able to talk about it online using *Subtext* or *Google Docs*, we could respond to different parts of the text. Teachers could raise questions for colleagues to consider or ask for feedback on particular interpretations. School leaders would also have a recorded record of faculty's interactions and reactions to the professional development text. A final example could be the development or revision of a school's mission and vision statement. Faculty might be more inclined to ask provocative questions and really dig deep into what the school really believes. The use of the approach in this study could be a very useful tool for school leaders as they look to assist their communities in grappling with difficult problems.

The "Final Word" protocol is a wonderfully flexible tool, and when used in concert with real-time technologies such as *Google Docs* and *Subtext*, there exists a wide range of possible applications. I'm looking forward to using this approach in my different roles as sixth-grade teacher, graduate-level course instructor and aspiring school leader. I hope the reader finds the approach detailed in this study equally useful.

Appendices

A) Using the Final Word Protocol

The Final Word

Adapted from the original by Daniel Baron and Patricia Averette

Purpose

The purpose of the Final Word Protocol is to expand the interpretation of one or more texts by encouraging the emergence of a variety of interests, viewpoints and voices. By forcing everyone to offer an interpretation, and to listen closely to and reflect back others' interpretations, Final Word ensures the emergence of diverse perspectives on texts. It also helps participants feel safer in posing what may be offbeat or dissident interpretations because the protocol implicitly avoids consensus building. (McDonald et al., 2003, p. 35)

Roles

Facilitator, participants (works best in groups of 3 or 4)

Process

An entire cycle of the Final Word protocol consists of three steps. Each step could happen on a different day, for example, if this was given as a homework assignment. This could also be implemented as an in-class activity where each step is given a set amount of time.

Step One – In this step, each participant takes on the role of “facilitator” and begins a discussion around a specific portion of the text. The participant selects a piece of text that indicates a significant idea or question. Then the participant begins the discussion around the text by describing why that quote struck him or her. “For example, why does s/he agree/disagree with the quote, what questions does s/he have about that quote, what issues does it raise for him or her, what does s/he now wonder about in relation to that quote?” (Fischer-Mueller & Thompson-Grove, n.d.)

Step Two – In this step, each participant finds the selected quote and discussion prompt of the other members of the discussion group. Then each participant replies to the discussion for that quote. The purpose of this reply is:

- To expand on the presenter’s thinking about the quote and the issues raise for him or her by the quote
- To provide a different look at the quote
- To clarify the presenter’s thinking about the quote, and/or
- To question the presenter’s assumptions about the quote and the issues raised (Fischer-Mueller & Thompson-Grove, n.d.)

Step Three – In this final step, each participant returns to the “facilitator” role and gives the “final word”. The participant should carefully read the replies of the other participants and then reflect on the posts with a final reply. The purpose of this is:

- To reflect on how the presenter’s thinking has shifted or not shifted
- To summarize the arguments of the original post and the arguments of other participants and offer synthesis
- To share general reactions to what has been shared
- To offer suggestions for further questioning and explorations

Possible Timing/Scheduling Suggestions

If the facilitator plans to implement the protocol by having students work at home, this could be a possible schedule. On Tuesday, texts are shared to the discussion group. That night, each participant in the group chooses their selection and writes their discussion prompt. On Wednesday night, participants complete step two. On Thursday night, participants complete step three.

If the facilitator plans to implement the protocol in a timed environment, participants might be given 15 minutes to complete step one, 10 minutes to complete step two and 15 minutes to complete step three.

Video Demonstrations

<i>Subtext Implementation</i>	<i>Google Docs Implementation</i>
 <p data-bbox="289 1486 553 1518">Figure 1 http://goo.gl/Hfclk</p>	 <p data-bbox="880 1486 1144 1518">Figure 2 http://goo.gl/mvBy2</p>

References

McDonald, J. P., Mohr, N., Dichter, A., & McDonald, E. C. (2003). *The power of protocols: an educator’s guide to better practice*. Teachers College Press.

Fischer-Mueller, J., & Thompson-Grove, G. (n.d.). *The Final Word*. National School Reform Faculty.

B) Using Subtext: Setting up a text for discussion

The “Final Word” Protocol with Subtext – How to Set up Your Text

Prerequisites: Facilitators and participants must have the iPad app *Subtext* installed. You can find the app in the App Store or get more information at <http://subtext.com>. Everyone should also have established usernames and passwords for Subtext.

Step 1) Any text you find online can be imported into Subtext using the “Save to Subtext” bookmarklet. This process is demonstrated in the following video:



Figure 3 <http://goo.gl/k9Ce3>

Step 2) Once the text is imported into Subtext, the facilitator creates a discussion group and adds the text into the group library. This process is demonstrated in the following video:



Figure 4 <http://goo.gl/zrEKd>

Step 3) Now the facilitator invites participants to join the group by emailing the group code generated by the Subtext app. This process is demonstrated in the following video:



Figure 5 <http://goo.gl/eByWx>

Step 4) Participants launch the Subtext app and join the group by using the group code sent out in the email. Then the participant adds the text into her library and begins the protocol. This process, and the full implementation of the protocol, is demonstrated in the following video:



Figure 6 <http://goo.gl/Hfclk>

C) Using *Google Docs*: Setting up a text for discussion**The “Final Word” Protocol with *Google Docs* – How to Set up Your Text**

Prerequisites: Teachers, facilitators and participants must have Google logins and access to a device that can access *Google Docs*. Further information on *Google Docs* system requirements can be found at <https://support.google.com/drive/answer/2375082?hl=en>. All parties must have an Internet connection.

Step 1) Find a text online and copy and paste it into a new Google Doc. Then share the Google Doc with the discussion group using the permission level “can comment”. This process is demonstrated in the following video:



Figure 7 <http://goo.gl/3CwRR>

Step 2) Students log in to their Google Mail accounts and click on the link for the new document. Then the participants implement the protocol as described in “Using the Final Word protocol in *Google Docs*: Directions for facilitators and participants.” This is demonstrated in the following video:



Figure 8 <http://goo.gl/mvBy2>

D) Possible Texts for Use with the Final Word protocol

K-12

The Preamble to the Constitution is a short, rich text, suitable for analysis by children in early adolescence and up.

<http://goo.gl/5cVJx>

Edward Hicks' painting – The Peaceable Kingdom is a fascinating work rich in symbolism and utilizing an unusual American style.

http://commons.wikimedia.org/wiki/File:WLA_brooklynmuseum_Edward_Hicks-The_Peaceable_Kingdom.jpg

Eternity by William Blake is a short poem with a certain amount of ambiguity. This would be useful for discussions on the poets' meaning

<http://goo.gl/i1Vup>

How do I love thee by Elizabeth Barrett Browning is a classic poem rich in images and evocative language.

<http://goo.gl/8CuaS>

Higher Education

Video on Piaget's concept of Preoperational Thinking. This video gives a series of demonstrations of children performing some of Piaget's tests. This could be a rich text for a class on Child Development

<http://www.youtube.com/watch?v=GLj0IZFLKvg>

State of South Dakota Final Eighth Grade Examination is a fascinating primary document. This would be an excellent text to examine in a course on educational history.

<http://goo.gl/jHdoo>

Professional Development

The Common Core Standards for Mathematical Practice describe the underlying mathematical habits and attitudes that the authors wish to see develop. This could be a rich text for a professional development session.

<http://www.corestandards.org/Math/Practice>

The Bank Street College Mission and Credo is a clear example of a straightforward, clear and evocative mission/vision statement. The use of the "Final Word" protocol could be particularly interesting for visioning exercise in a school leadership context.

<http://bankstreet.edu/school-children/about-sfc/mission/>

E) How to Read QR Codes on an iPhone or iPad

QR, or Quick Response, codes are two-dimensional bar-like codes composed of black-and-white patterns enclosed by a square border. They appear in magazine ads, posters and sidewalk signs, offering a quick way to get more information about a product, event or organization. QR codes typically link to Web pages or YouTube videos; some are simply brief messages in text. The iPhone's App Store has many applications that read QR codes and display the linked information with a few taps of the screen. Most of these programs are free.

USING THE GOOGLE SEARCH APP

STEP 1

Download and install the Google Search app.

STEP 2

Press the "Home" button, then tap the Google app to launch it. The main screen appears with three icons labeled "Apps," "Voice" and "Goggles."

STEP 3

Tap the "Goggles" icon, and then aim the iPhone's camera at the QR code you wish to read. Hold the phone steady and fill as much of the screen as possible with the QR code pattern. The Google app automatically finds the code and displays a link to the information.

STEP 4

Tap the link. The Google app reads and displays the Web page on your screen.

(Barret, 2013)

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