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In Pursuit of Meaningful Dialogue: Using Protocols to Improve Discussion in Online and Face-to-Face Courses

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The Use of Protocols to Improve Discussion

In Pursuit of Meaningful Dialogue: Using Protocols to Improve Discussion in Online and Face-to-Face Courses

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Abstract

The purpose of our article is to discuss the use of a discussion strategy called *protocols,* which can be used in both online and face-to-face environments. Protocols provide a structured way of having a discussion that empowers all students to contribute their ideas in a safe environment by providing specific rules and clear roles for guiding the discussion. First, we provide a brief background on protocols and our experience with using protocols within an online course titled Orientation to Deafness. We then provide readers with a variety of example protocols that can be used in both face-to-face and online environments. We also provide example ground rules, which provide instructors with the necessary information to implement these protocols. The article concludes with the implications of using these protocols within the field of signed and spoken language interpreting.

Key Words: teaching, online instruction, discussion, protocols, interpreting

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1. Introduction

Educators continually look for ways to engage students in richer discussions, encourage critical reading of the text, elicit different opinions from their students, and create equity in their classrooms (McDonald, Zydney, Dichter, & McDonald, 2012). This is difficult to achieve in the classroom because not all students feel comfortable contributing to the discussion, and it is challenging to break down barriers so that students can trust one another in order to effectively communicate about sensitive issues—in the field of signed language interpreting, these may include ethical-decision making, cultural considerations, and general challenges faced during the process of interpreting. Thus, educators are in pursuit of instructional strategies that help break down these barriers and create a greater sense of community and more interactive experiences for students. In this article, we describe applications of a discussion strategy called *protocols,* which are structured ways of having conversations that foster a trusting environment and encourage critical thinking and different perspectives in the classroom (McDonald et al., 2012).

Although protocols can be used in both face-to-face and online environments, they are particularly useful in online environments in which students often feel more isolated and disconnected from one another (Hewitt, 2003). Additional challenges in online learning may include low levels of critical thinking or cognitive processing (Maurino, Federman, & Greenwald, 2007; Wang & Chen, 2008) and limited student interaction among participants (Wang & Chen, 2008). Given the dramatic increase in the number of students taking online courses (Allen & Seaman, 2011), educators must find solutions to address these challenges. Educators have begun to design discussion prompts, such as protocols, to help students feel more connected, increase student interaction, and create deeper discussions that elicit higher levels of thinking.

> Effective online discussion prompts provide a frame of reference through an associated shared experience or learning activity, but there are numerous creative ways in which this context can be brought to bear. For instance, discussion prompts may involve or invoke personal experience, hypothetical situations, opinions (with substantiation), student-created work, video clips, and so forth (Thompson, deNoyelles, Chen, & Futch, 2012, para. 5).

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2.   Protocols in Action

The concept of protocols emerged in the 1980s during the school reform movement, as a way to help educators structure meaningful conversations around their practice. At that time, protocols were focused on problem solving and reflection. They supported sharing, responsibility, and continuous improvement within teams. (McDonald, Mohr, Dichter, & McDonald, 2007). Over time, educators started to use protocols with their students to help them learn and engage in their own reflective processes and to enable student-centered, intellectually ambitious, and team-based learning. *Protocol pedagogy* has since emerged as a general term to discuss the use of protocols for teaching and learning (McDonald et al., 2012). Historically, online protocols were simply rules and timeframes for posting (Gilbert & Dabbagh, 2005). More recently, online protocols have included not only rules for posting, but also guidelines that provide a clear purpose for the discussion, explicit roles for participants in the discussion, and clear directions for participant interactions (McDonald et al., 2012). Recent research has demonstrated that online protocols improved students' shared cognition, creating a more student-centered experience and balanced distribution of facilitation between the instructor and the students—reducing the instructor's burden to manage the facilitation (Zydney, deNoyelles, & Seo, 2012).

Protocols offer many advantages, including

- keeping a group conversation focused in a limited amount of time,
- encouraging all members of the group to offer feedback,
- helping less verbal participants offer their voices,
- promoting thoughtfulness by allowing personal reflective time,
- encouraging dialogue featuring multiple perspectives,
- requiring individuals presenting their work to remain silent at times so that feedback and insights offered from their colleagues are not lost,
- reminding individuals to return to the evidence offered rather than focus on opinions, and
- providing a safe and supportive structure for all. (Teachspace, n.d)

Online protocols for learning can also provide opportunities for students to engage in ownership around the design of the course (Zydney et al., 2012).

Protocols can be used regardless of delivery method (face-to-face vs. online), and they can be used not only with text: Social media provides numerous tools that can support the use of prompts in a dynamic environment (VoiceThread, blogs, etc.). Carroll (2001) provides a strategy for thinking pictorially through visual metaphors, where a device is used to encourage insight and propose food for thought without stating its purpose. Joyner (2012) proposed the use of visual metaphors with a "Wordle," a word cloud, to generate a discussion around a visual display of responses to the prompt. This adaptation provides yet another way in which prompts for discussion can provide richer, more meaningful learning experiences for students.

Researchers have begun to test the use of protocols in online discussions in the field of signed language interpreting. For example, in one study (Zydney, Ergulec, Angelone & Ehrlich, 2013), we assessed the use of the protocol "Save the Last Word for Me" in a course called Orientation to Deafness, to help students make connections between the book *Inside Deaf Culture* (Padden & Humphries, 2006) and a related NPR broadcast (http://www.npr.org/books/titles/138451579/inside-deaf-culture). "Save the Last Word for Me," a variation of the "Final Word" protocol, was originally developed by Daniel Baron and Patricia Averett (described in McDonald et al., 2007). In this protocol, students were asked to select an intriguing quote from the book that related to the NPR broadcast. Each student then posted the quote for others in the group to discuss, without revealing why he or she chose that particular quote. The remaining group members commented on one another's quotes, leaving the opportunity for the student who posted originally to share his or her own interpretation of the quote at the conclusion of the discussion—to have the "last word." Through this process, students were able to explore ideas related to the text and develop their own thinking and perceptions. Initial findings indicated that the protocol may have helped students feel more connected, resulting in a lower drop-off rate than students in a comparison group who did not receive that protocol. The protocol also helped shift the ownership of the discussion to students, making it more student centered (Zydney et al., 2013). The instructor of the course felt that "the discourse in the

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groups with the protocol reflected deeper thinking and reflective insight that the groups without the protocol did not demonstrate as highly" (Zydney et al., 2013).

2. Examples of Adapted Protocols

In this article, we describe how face-to-face protocols can be adapted for online environments (see Table 1) as well as suggest how educators can integrate protocols as they develop ground rules for enhanced discussion (see Table 2). The following protocols are a sampling of the vast number of protocols available. We chose these based on our experience using them, as well as on our assessment of their suitability for adaptation to the interpreter education classroom. We designed each adaptation with careful consideration of evidence-based practice and research.

Table 1: Protocols Adapted from Face-to-Face to Online

Name: **Four As** (Adapted from Gray, 2005)
Purpose: This protocol helps students to deepen their understanding of a text and analyze it. The protocol works especially well when participants need to approach the text from different perspectives. It engages students in reading while helping to develop critical-thinking skills.

Face-to-face	Online
(10 minutes) *Introduction:* The group silently reads the text. During this time, group members should be highlighting and documenting notes with answers to the following four questions (you can also add your own As): •What do you find *Affirming* in the text? • What do you *Agree* with? • What, in the text, do you want to *Argue* with? • What parts of the text do you want to *Analyze* further? **(10 minutes)** *Reactions:* In groups, have each person identify one affirming statement in the text, citing where necessary. Provide enough time to explore each. **(30 minutes)** *Remaining As:* Either continue in group discussions or facilitate a conversation in which the class as a whole talks about each of the three remaining As, reviewing each one at a time. Provide enough time to explore each.	**(1 week)** *Suggested:* This protocol is suggested for use with class sizes between 10 and 20 students, with groups of four to six. *Organization:* Prior to the online week, the facilitator should create a new forum on the discussion board with a title of the topic of the discussion. *Introduction and Selection:* The facilitator posts the directions for the protocol. In these directions, the facilitator assigns half of the students to an "Agree" group and the other half of the students to an "Argue" group. The Agree group answers the following question: "What do you Agree with in the text?" In contrast, the Argue group answers the question: "What do you want to Argue with in the text?" *Presentation:* All students read the assigned text and post their responses to the assigned question. This initial posting is due 3 days into the start of the online week to give everyone a chance to read the text. *Reactions:* All students in the class reply to at least two people's responses from the other group. For example, a student in the Agree group will respond to two students' threads in the Argue group. In their

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(5 minutes) *Conclusion:* When concluding the activity, provide an opportunity for an open discussion focused around a question such as, What does this mean for our work as interpreters? **(5 minutes)** *Debrief:* Debrief the experience of analyzing the text by responding to example debriefing questions such as, What did we learn? How might we build on this conversation? How can you improve your work as a result of this discussion? (Wentworth, n.d.).	responses, students provide their reaction to the comment, substantiating it with supporting citations. Then, the students who own the thread provide their rebuttals to the other group. This posting is due 2 days after first posting. *Last Insights:* Students read the responses they have received for their initial posting and answer the following question: "Based on your discussion, what parts of the text do you want to Aspire to or Avoid?" This posting is due 2 days after the second posting. This could also be conducted in an online interactive discussion board such as VoiceThread, using different slides for each discussion.

Name: **Thinking Colors, aka Six Thinking Hats** (Adapted from Burdick, 2011)

Purpose: This is a simple and effective parallel-thinking process that helps students to be more focused and involved. The purpose of this protocol is to help students look at decisions from a number of important perspectives.

This protocol can be used to assist with analyzing various roles, perspectives, and assumptions held during the interpreting process and ways in which all of these can influence the decision-making process. It can account for a variety of participants' perspectives, including but not limited to interpreters, community members, service providers, and others.

Roles:
Neutrality (White): Asks questions. With the information provided, what are the facts?

Feeling (Red): React with gut instinct and statements based in emotional feeling (absent of any justification).

Negative judgment (Black): Looks for inaccuracies in the discussion by applying logic and pointing to barriers.

Positive Judgment (Yellow): Is in pursuit of harmony by using logic to highlight benefits.

Creative thinking (Green): Generates conversation by prompting group with statements of provocation and investigation.

The Big Picture (Blue): Keeps the group on task and establishes objectives (this is typically the role of the facilitator).

Face-to-face	*Online*
(1–2 minutes for each student) Organize students into groups of five, one person for each color. The sixth color should be assigned to the facilitator. Students are each assigned a card with the assigned color, and then take on the role represented by the color during the discussion. During each participant's time, participants speak from the role they have	**(2 weeks)** *Suggested*: Divide students into small groups of five or six. The steps we present here are from the asynchronous version, but it can also be used in synchronous format. For example, it could be made more fun through a 2-D avatar chat, where an icon shows the role each student plays or different colors of text on an online whiteboard represent the different

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assumed, and only from that perspective, discussing the topic highlighted for that discussion.	positions.
	Preparation: After the teacher has designated groups prior to meeting online, as outlined above, the participants are each assigned a role and are asked to play the roles represented. (Find the roles in the purpose section of this protocol).
	Introduction: The teacher posts directions for the protocol and explains the role of each participant.
	Presentation: Each group discusses the topic in small groups, using its own discussion board. After the small group discussion, one member of the group (selected by the group or the facilitator) posts the group's decision to the main discussion board. Suggested time for this section is 1 week.
	Reaction: All students reply to the initial postings of one of the other groups' decision. These replies can take the form of comments or questions. This posting is due 3 days after the initial posting.
	Final Posting: Each student individually replies to at least one response to his or her group's decision. This response is due 4 days after the reaction posting.

Name: **Surface Significant Ideas** (Adapted from Glaude, 2011)
Purpose: To promote conversation around the main ideas of a text that has personal significance to readers and to foster shared understanding of main ideas.
This protocol offers an opportunity to facilitate a discussion that highlights how interpretations of texts are in the eye of the beholder and can and do vary from person to person. This is especially critical to the field of interpreting, in which analyses of concepts may vary for a variety of reasons, thus influencing the final product from interpretation.

Face-to-face	*Online*
Prior to the Conversation: The text is distributed to all students. Students highlight two passages with ideas that represent what they believe to be most significant and choose one to share, and provide a rationale for their selection.	**(1 week)** *Suggested:* The protocol takes one online week to facilitate and it is best done with class sizes between 10 and 20 participants. Groups should be limited to four to six participants.
(2 minutes) *Introduction:* The facilitator and timekeeper are selected. Ground rules and goals are	*Introduction:* In order to participate in the protocol, participants must have online access to the text(s) that will be discussed. The facilitator posts the directions

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reviewed with the group.

(2 minutes) *Sharing the Quote or Passage:* Each student writes his or her chosen (short) passage on paper, which is then taped to the wall. Page numbers should be referenced (next to the relevant passage). Only one passage per slip of paper.

(30 minutes) *Sharing the Significant Ideas:* One person begins by presenting one significant idea from the text, why he or she viewed it as significant, and what relevance it has to his or her work. Other students in the group contribute to the idea after the original student has shared. Each student is limited to 7 minutes to contribute to the significance. This process continues until each student has presented a significant idea. When an idea is identified as connected to another, those two pieces of paper are moved closer to one another. If time is available, the second significant idea can be discussed using the same process as above.

(3 minutes) *Closure:* Each group reviews what has been discussed and highlights what the group learned. If small groups are used, the small groups can report findings to the larger group.

(2 minutes) *Debrief the Process:* Students comment on ways the protocol supported their learning and how it might be improved.

for the protocol and gives everyone 3 days to read the text(s). If this is not enough given the course requirements, the facilitator must give participants enough time to read the text(s) prior to posting their first response.

Presentation: Each participant selects a quote or passage that represents the most significant ideas. Participants post this as a new thread within the forum. The facilitator encourages participants to try to pick quotes that no one else has chosen. Each participant posts his or her quote and states why it is significant and what implication it has for his or her work. This initial posting is due 3 days into the start of the online week to give everyone a chance to read the text(s). If the facilitator would like to run this protocol for 2 weeks, then students would be required to look for more than one quote or passage.

Reactions: All participants in the class reply to at least one person's quote to add to the stated idea. This posting is due 2 days after the initial posting.

Closure: Each participant summarizes what he or she has learned from this activity. He or she also comments briefly on how the protocol supported his or her learning and how he or she might improve upon it. This posting is due 2 days after the second posting.

Name: **Challenging Assumptions** (Glaude, 2011)

Purpose: This goal of this protocol is to examine personal meaning and share insights on one key concept from a text or discussion.

This protocol provides students a structure not only to discover their own interpretation of the key concept, but also to explore how their perspective may differ from that of their peers. The protocol provides an added dynamic for group members to negotiate and compromise on central key concepts.

Face-to-face	*Online*
(2 minutes) *Introduction:* After a facilitator is chosen, both the ground rules and the protocol are	**(2 weeks)** *Suggested:* The protocol takes two online weeks to facilitate and it is best done with class sizes

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reviewed.	between 10 and 20 participants.
(3 minutes) *Prior Knowledge:* After reviewing the key concept, each student independently writes down thoughts about the meaning of the key concept.	*Preparation:* Prior to the first week, the instructor organizes the participants into pairs. The instructor must give participants enough time to read the text prior to posting.
(5 minutes) *Partner Discussion:* Pairs of students discuss ideas discovered.	*Introduction:* The instructor posts the directions for the protocol. Introduce TitanPad, a Web-based collaborative real-time editor for creating a collaborative document; users do not have to create accounts.
(10 minutes) *Develop Ideas Further:* Each pair joins another pair to discuss ideas that emerged from the previous discussion.	*Prior Knowledge Presentation:* The instructor requires the paired students to create a shared TitanPad and share the link with the instructor. Each person (individually) writes down his or her thoughts on TitanPad about the meaning of the key concept by completing the following sentences. (Each person must write at least 5 thoughts for each sentence.)
(5 minutes) *Summarize:* Together, the two sets of pairs collaborate to create an outline of what the group believes the key concept is and is not.	I think _____ is… I think _____ is NOT… This initial posting is due in the middle of the first week, before reading the text.
(2 minutes) *Debrief the Process:* Students briefly comment on how the protocol supports their learning and how the protocol might be improved.	*Preparation:* By the end of the first week, everyone reads the designated text(s) on this concept.
	Making Changes (Optional): The students may cross out any of their ideas. They may move or add to either of the two sentences (outlined above). This posting is due by the beginning of the second week.
	Discussion: Partners discuss the ideas on their TitanPad by using the chat function. As they discuss, they may connect/move any of their ideas from positive to negative or vice versa. They may also add to either sentence. This occurs during the first half of the second week.
	Summarize: Based on their discussions, the two partner pairs come together to organize their ideas about what this concept is and is not. This is due by the middle of the second week.
	Presentation: Students share their TitanPad links with the whole class. This posting is due at the end of the second week.

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Name: **Provocative Prompts** (McDonald et al., 2007; McDonald et al., 2012)	
Purpose: This protocol helps promote a course culture that considers disagreement as productive for learning. It encourages the development of different perspectives on a topic under consideration. This protocol offers an opportunity to facilitate a discussion around controversial topics within the Deaf community and the field of interpreting. Students have the opportunity to examine a topic of controversy from various points of view—a necessary skill in interpretation.	
Face-to-face	*Online*
Preparation: Instructor chooses quotations ("provocative prompts") in advance and prepares copies of quotes with sources to share with the class. *Quotes Distributed:* The facilitator distributes quotes randomly, each written on a piece of paper. **(3–5 minutes for each student)** *Choose First Quote (Agreement):* Each group member chooses one quotation and, going around in a circle, shares why he or she made that choice. **(3–5 minutes for each student)** *Choose Second Quote (Disagreement)*: Each group member chooses a second quotation that provokes him or her to think differently about the topic at hand and writes a brief account of why this impacted his or her thinking. **(3–5 minutes for each student)** *Form Partners*: Partners share their ideas with a partner. The partners reflect back on what was shared. If time permits, there can be several changes of partners. *Optional*: Facilitator posts quotations on chart paper around the room. Students use Post-It notes to post ideas and thoughts surrounding the quotations with questions and comments where necessary.	**(1 week)** *Suggested:* This protocol takes an online week to facilitate and is best used for smaller classes. Prepare enough quotes to have about five or six responses per quote. *Organization*: Create a new forum on the discussion board where quotes can be posted for "agreement," "disagreement," and "new insights." Students are to find one quotation that they agree with and one they disagree with. *Initial Posting—Agreement*: Students post a response to a quotation that they agreed with and explain why in that post. This is due mid-week. *Initial Posting—Disagreement*: Students post a response to a quotation that they disagreed with and explain why in the post. This is due mid-week. *Final Posting*: By the end of the online week, participants read through threads for both quotations and then post to the "new insights" forum shared ideas gained as a result of reading other students' perspectives.

As outlined above, these protocols provide a beginning framework for restructuring the way we think about discussions. By considering ways in which we can engage students in the process of learning, we aim to foster critical thinking and new insights in the context of dialogue, whether face-to-face or online. Protocols can provide students opportunities to develop deeper thinking around engaging conversation as well as provide educators opportunities to advance their teaching practice in ways that benefit students' learning. Through the use of protocols, educators can create unique, student-centered, online experiences, challenging traditional methods of online instruction that may not yield equally meaningful results during online discussions.

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2.2 Ground Rules

When integrating the use of protocols into discussions, it is imperative to establish ground rules for those participating in the discussion. Ground rules provide an opportunity to build trust, clarify expectations, and establish points of reflection to check in with the group to examine progress (Wentworth, n.d.). Ground rules can vary, but here are a few examples:

- Bring your most challenging ideas to the conversation.
- Celebrate feedback that tests you.
- Think deeply and reflect on responses (signed, spoken, or written) and respond only after such reflection has taken place.
- Help others feel comfortable when sharing their thoughts and challenges.
- Be mindful of the protocol and keep the conversation focused.

Wentworth outlines a detailed process that requires group input, for developing ground rules for protocol discussion (found at http://www.nsrfharmony.org/protocol/doc/forming_ground_rules.pdf).

Table 2: Process for Establishing Ground Rules for Discussion

Activity	Description
Brainstorm individually	Group members brainstorm their own needs for what it means to be productive. This should be done individually, prior to sharing with the group.
Share with group	Group members share an item from their lists. The goal is to not repeat a rule, and each member contributes a new rule through as many rounds as necessary.
Limit list	The aim should be for a maximum of 10 items on the combined list, limiting it to those that are essential. This may include combining and/or editing where necessary.
Achieve consensus	Group consensus should be attained. Buy-in from the group will establish a baseline for all involved.
Apply	Refer to the list as everyone progresses through discussions as a framework for understanding and mutual respect.
Adapt	Adapt ground rules as needed, including deleting/adding as needed.

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3.   Conclusion

In this article, we discuss how protocols can enhance face-to-face and online classrooms and offer suggestions for adapting in-class protocols to improve online discussions. These activities are designed to help empower students by giving them more ownership of the course design, increasing their social interaction with one another, and engaging them in higher-level learning. As new online learning opportunities in the fields of American Sign Language, Deaf culture, and signed language interpreting emerge, educators must develop their practice in leading students to richer experiences in online and face-to-face classrooms. Protocols are just one of the many ways in which educators can bring students together to collaborate, reflect, and ultimately construct new knowledge through shared experiences.

   We highlight only a few of the many protocols that exist to support teaching and learning. Readers interested in incorporating protocols into their teaching are invited to explore the many resources provided in this article and in books such as McDonald et al. (2012a) and McDonald et al. (2013), which not only outline many types of protocols but also provide a history, framework, and design of protocols for various discussion needs. Protocols provide that "next step" in online and face-to-face learning, giving course instructors practical tools to enhance interaction and manage discussions. As more and more courses move online, protocols will become increasingly critical in guiding students as they navigate learning within these courses.

References

Allen, I. E., & Seaman, J. (2011). *Going the distance: Online education in the United States, 2011*. Sloan
      Consortium. Retrieved from http://sloanconsortium.org/publications/survey/going_distance_2011

Burdick, D. (2011). *The teaching professor. Small group discussion protocols (20 Examples).* Retrieved from
      http://www.teachingprofessor.com/wp-content/uploads/Burdick-2011_Discussion_protocols_v4.pdf

Carroll, N. (2001). *Beyond aesthetics: Philosophical essays.* Cambridge, UK: Cambridge University Press.
      doi:10.1017/CBO9780511605970

Glaude, C. (2011). *Protocols for professional learning conversations: Cultivating the art and discipline*.
      Courtenay, British Columbia, Canada: Connections Publishing.

Gray, J. (2005). *Four 'A's text protocol*. National School Reform Faculty: Harmony Education Center. Retrieved
      from http://www.nsrfharmony.org/protocol/doc/4_a_text.pdf

Hewitt, J. (2003). How habitual online practices affect the development of asynchronous discussion threads.
      Journal of Educational Computing Research, 28, 31–45. doi:10.2190/PMG8-A05J-CUH1-DK14

Joyner, F. (2012, October). *Models and metaphors: Developing critical thinking in asynchronous threaded
      discussions*. Paper presented at the Sloan Consortium 18th Annual International Conference on Online
      Learning, Orlando, Florida. Retrieved from http://sloanconsortium.org/conference/2012/aln/models-and-
      metaphors-developing-critical-thinking-asynchronous-threaded-discussion

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Maurino, P., Federman, F., & Greenwald, L. (2007). Online threaded discussions: Purposes, goals and objectives. *Journal of Educational Technology Systems, 36,* 129–143. doi:10.2190/ET.36.2.b

McDonald, J. P., Mohr, N. Dichter, A., & McDonald, E. C. (2007*). The power of protocols: An educator's guide to better practice* (2nd ed.). New York, NY: Teachers College Press.

McDonald, J. P., Mohr, N. Dichter, A., & McDonald, E. C. (2013*). The power of protocols: An educator's guide to better practice* (3rd ed.). New York, NY: Teachers College Press.

McDonald, J.P., Zydney, J.M., Dichter, A., & McDonald, E.C. (2012). Going online with protocols. New tools for teaching and learning. New York, NY: Teachers College Press.

Padden, C. A., & Humphries, T. L. (2005). *Inside deaf culture*. Boston, MA: Harvard University Press.

Teachspace. (n.d.). *Learning protocols* [PowerPoint slides]. Retrieved from http://teachspace.us/Bolivar%20f05.htm

Thompson, K., deNoyelles, A., Chen, B., & Futch, L. (2012). Discussion prompts. In K. Thompson & B. Chen (Eds.), *Teaching online pedagogical repository* Orlando, FL: University of Central Florida Center for Distributed Learning. Retrieved from http://topr.online.ucf.edu/index.php?title=Discussion_Prompts&oldid=2337

Wang, Y., & Chen, V. (2008). Essential elements in designing online discussions to promote cognitive presence: A practical experience. *Journal of Asynchronous Learning Networks, 12, 157*–177. Retrieved from http://eder677spring2010.wikispaces.com/file/view/cognitive+presence.pdf

Wentworth, M. (n.d.). *Forming ground rules*. National School Reform Faculty. Retrieved from http://www.nsrfharmony.org/protocol/a_z.html

Zydney, J.M., deNoyelles, A., Seo, K. (2012). Creating a community of inquiry in online environments: An exploratory study on the effect of protocols on interactions within asynchronous discussions. *Computers & Education, 58*(1)*,* 77-87. doi: 10.1016/j.compued.2011.07.009

Zydney, J.M., Ergulec, F., Angelone, L., & Ehrlich, S. (2013, April). Enhancing student connections through online protocols. Poster presented at the annual meeting of American Educational Research Association, San Francisco, CA.