

Questioning for Controversial and Critical Thinking Dialogues in the Social Studies Classroom

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Questioning as an Educational Tool

The design and implementation of questioning, specifically in regards towards a higher level of thinking, is a common practice in many secondary social science classrooms (Bickmore & Parker, 2012). Questioning can help the teacher develop critical thinking concepts, scaffold discussions, and prod students towards an elevated level of cognition (Yang, Newby & Bill, 2005). It can also aid in guiding group discourse and help students in developing a rational understanding of a problem or concept (Byun, Lee, & Cerreto, 2014; Godfrey & Grayman, 2014). Yet many educators may feel limited or not prepared in their conception and ability towards this practice. The confusion is merited, in some respects, as questioning is a skill not easily mastered or understood.

To conceptualize questioning it may be best to define the word by its basic meanings. The *American Heritage Dictionary* (1991) defines a question as “an expression of inquiry that invites or calls for a reply” (p.1015). It subsequently defines the word, in the case as a noun, with ten definitions clustered in seven primary groups. As a verb, it can be delineated as either transitive or intransitive with the dictionary hav-

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ing four different definitions (Berube, et al., 1991). However, by limiting the definition to components of speech, a question may be ‘used’ as an interrogative, an abstract, a rhetorical inquiry (though not always), a point or part of a controversy and debate, or as a reflective or inquisitive tool or manipulative (1991). Here, the latter definitions are what we are going to explore. Regarding structure, a question can be defined as both well-fitted, with clear and expected outcomes, or as ill-fitted, or lacking expected outcomes. The ill-fitted type of structure, usually inferred as an open ended question (though not always), is generally seen as more productive towards achieving higher order thinking (Byun, Lee, & Cerreto, 2014). Towards a group or class, such teacher led questioning can help in developing critical thinking dialogues where respondents engage in civil discourse on a variety of topics, some possibly controversial in nature (King, 2002; Ochoa & Pineda, 2008). This dialogue can be beneficial to students in many ways.

For this article three different terms are utilized; discussion, discourse and dialogue. The online dictionary, *Mirriam-Webster* (2015) defines discussions as talking about something with others or within the act of answering or responding to a question in an informal debate. The *American Heritage Dictionary* (1991) defines it as “the consideration of a subject by a group” or a “formal discourse of a topic” (p. 404). Discourse, by the *Mirriam-Webster* dictionary, is clarified as a verbal interchange of ideas, while dialogues are explained as a conversation between two or more people, also in an exchange of ideas and opinions (2015). The *American Heritage Dictionary* develops dialogue as “a conversation between two or more people” or “an exchange of ideas or opinions” (p.392). Of course, these are very simplistic definitions and do not go towards the epistemological or axiological underpinnings of these terms, such as the development of discourse theory or towards more developed dialogic constructs (Foucault, 1977; Purmohammad, 2015; van Luesen, 2007). In these, highly involved and complicated concepts of language, power, syntax, and form (to name a few) are intertwined theories of thought and understanding, concepts far more complex than needed here. For the sake of reading clarity, all three will be used under the simple definition of ‘talking with others in an exchange of ideas or opinions.’

To engage in dialogue of opposing views needs to involve a multi-modal perspective utilizing both active and passive learning styles. If the process is respectful and engaged, students can develop new and different information as compared to their own perspective or lens. This information is then rationalized; accepted or rejected according to one’s perspective (Johnson, 2001). The process is not quick, however, as

the socio-cognitive dissonance or disorder created by hearing divergent views can cause 'instability' in one's perspective, forcing the participant to reconcile the differing concepts to bring back or correct their internal order or understanding (King, 2002).

This is an quintessential critical thinking activity, defined by Bloom (1956) as the highest form of thinking; i.e., 'create,' utilized in this context as a new (created) construct or understanding (Krathwohl, 2002). Such thinking should be utilized as a discrete function, established in a classroom format or activity (Duke & Pearson, 2011). An informal application of critical thinking exercises in a class discussion can be more conducive towards attaining higher cognition and will effectively engage more students. Developed as part of the instruction, critical thinking is attainable as long as it is coordinated to the format and expectations established within the classroom (Cotton, 2000). This is also true of passive participants who, though not actively engaged in the conversation, are nonetheless hearing divergent concepts, some radically different to their own (Bickmore & Parker, 2014; Ohoa & Pineda, 2008; Welton, Harris, LaLonde, & Moyer, 2015). Though they are not talking, this type of activity can still assist these students in generating meaning towards new and different contexts. It also will help model positive dialogue and illustrate potential gaps in their own knowledge and understanding (King, 1992; Tofade, Elsner, & Haines, 2013; Wilson & Smetana, 2011).

Higher levels of thinking can help lead to understanding and empathy for others; the lives, events, ideals and/or beliefs of people in a pluralistic society (Godfrey & Grayman, 2014; Mehrmohammad, 2004; Welton, et al, 2015). Benjamin Franklin endorsed this view, believing that students should "debate...major controversies of the day," as well as Thomas Jefferson, who believed that students needed to understand how to "participate effectively and intelligently in our open political system" (Access, 2003, P.1). To both men and other educational proponents, this is necessary for citizens to function in an open and democratic society. The need for this skill still exists today. This includes using conflict dialogues such as controversial issues to disseminate divergent views and ideas to even the passive participants in a group (Bickmore & Parker, 2014; Chin, 2006; Welton, et al, 2015). In context, these are necessary learning activities for the critical analysis of topics relevant to today as well as the skills needed in discussing these issues in a civil, behaved manner.

With students doing the talking, the conversation is dialogic or student controlled; developing a back and forth discussion without the teacher as the primary control agent (Harjuan, 2012). This helps develop the culture and form of power (of the classroom) necessary for critical discourse (Harjuan, 2012; Nystrand, Wu, Gamoran, Zeiser, & Long, 2001).

As the teacher gives more discretion to students they become more attuned and knowledgeable of each other; their differences, similarities, interests, etc., and are potentially more at ease within a larger group. This classroom culture can then influence students, helping them to develop a feedback loop with the actively engaged or in the case of quiet students, at least able, or willing, to hear concepts and views they had not heard or thought of before. And for some, to stop being afraid or at least intimidated to say out loud and publically to others outside their normative boundaries or groups (Godfrey & Grayman, 2014; Harjan, 2012; Mayo, 2012; Welton, et al., 2015). Such peer involved, open critical thinking dialogues allows for students to become aware of issues from those they consider 'like themselves' and from those that are not. In doing so it can help develop empathy towards differences and to allow for the social context, or positive culture within the classroom to develop in ways to encourage the discussion of controversial, possibly even contentious issues and beliefs (Chin, 2006; Godfrey & Grayman, 2014; Harjuan, 2012; Smart & Marshall).

Issues Concerning Critical Questioning and Group Dialogues

For many educators, the (successful) teaching or discussion of controversial subjects can be a difficult and sometimes problematic task. The specter of potential parental and community disapproval or blowback is very real, leaving many teachers unwilling to engage in any activities that may develop controversy or could engender any opposing views or morals to public scrutiny (Lennon, 2009). Mandatory state and local outcomes are not immune as educators, eager to avoid issues or problems, engage in as limited form as possible to reduce the potentiality of these concerns (Bickmore & Parker, 2014; Lennon, 2009; Mayo, 2002). Regional cultural norms can also be problematic, as can prevailing class, social or racial expectations of conduct, all of which may limit teacher or student willingness towards provocative or inflammatory discussions (Godfrey & Grayman, 2014; Mayo, 2002; Ohoa & Pineda, 2008).

This is not good; neither for education or the public at large. Teacher reticence reflects the increasing polarization of political thought extremes, endangering willingness to teach controversial and critical issues (Lennon, 2009; Mayo, 2012). Students have become captive to vitriolic diatribes from opposing views lambasting others with labels and terms unfit for conversation. These outcomes are not designed to foster critical thinking but to engage in destructive tirades, demonizing the other's view as inferior to one's own (Gregory, 2014). As this continues the atmosphere permeating our society is of contrition and attack; that

one view is correct while the others' is wrong. This is problematic for a democracy built upon public discourse and engagement, a system in which public schools were initially developed to protect and promote (Authors, 2009). America enjoys a healthy and enabled republic form of government that only remains successful if citizens are educated properly in using it (Access, 2003; Bickmore & Parker, 2014).

The resolution to this problem lies in teaching children and young adults to engage in a discourse of different, possibly even contrary, views and ideals to their own system of beliefs. Such dialogue should incorporate multiple higher order thinking constructs in real time with new, novel and diverse ideas (Duke & Pearson, 2002). Those discussing may be unaware of the cognitive exercises incorporated during the activity; a development that may have positive benefits to students wary or insecure towards their beliefs or conceptions, possibly even building their confidence in return (Ohoa & Pineda, 2008; Tofade, Elsner, & Haines, 2013).

Studies have illustrated inconsistent gains however in cognition following such exercises, possibly due, in part to the incomplete or ineffective incorporation of their activities (Wang, 2001). Effectiveness can be difficult, both in implementing and in measuring, and teacher inhibitions towards them are valid and justified. Their concerns about disruption and blowback are very real and can carry negative repercussions to teachers. Yet critical thinking and student dialogues are such powerful tools for young adults and children that educators still need to try. Teachers, in some regards, mirror the societal norms of the community or region in which they teach. They may directly or indirectly foster or limit societal constructs of power or privilege detrimental to minorities or other non-privileged groups. This control or power privilege is permissive and for many may be unaware or unwilling to defy these conventions. Yet do so we must as our youth should be allowed to 'see' these power structures for what they are; most being outdated concepts of social propriety and zealotry. America is changing and we need to help our students in understanding this, even if we, the older generation may be uncomfortable in doing so.

Notwithstanding, these activities are usually seen as students' most memorable, and potentially their most valuable activities from their classroom experiences (Bickmore & Parker, 2014; Ohoa & Pineda, 2008). The discourse of difference and of diversity and controversy allows students to engage in scenarios they would ordinarily not experience. By allowing for some student control and in guiding their discussion we offer invaluable learning that may not be conducive to any other time in the children's' education. The benefits are well known, and though there are drawbacks, it is a needed exercise for educators to undertake

to really help students become active members of a diverse and changing society.

Implementing Group Dialogue and Culture necessary for Success

Incorporating student discourse and questioning in dealing with controversial issues is difficult to successfully implement. Many students will not answer in group dialogues, passing to others more assertive or confident to speak aloud. This is particularly true if the teacher doesn't utilize prompts or questioning or does so an incorrect way (Byun, Lee, & Cerreto, 2013; King, 1992; Wilson & Smetana, 2011). Students may also opt out from speaking or may answer similar to others despite disagreeing with them. This is usually due to the potential social context and peer pressure of the group, making them reluctant to discuss their possibly divergent views (Mayo, 2002; Moshagen, et al., 2014; Ohoa & Pineda, 2008; Tofade, Elsner, & Haines, 2013). To get them to do so, the teacher must be cognizant of the activity and knowledgeable of the culture in the classroom.

Teacher directed guidance is integral to developing and maintaining the dialogue into higher levels of thinking and in keeping students involved, whether they are actively talking or not (Byun, Lee, & Cerreto, 2014; Gregory, 2014; King, 2002). This alludes to the latter definition of questioning cited earlier, as a tool or manipulative in which to develop dialogue and possibly critical thinking (Berube, et al, 1991). The questioning should remain ill fitted in format and function, forcing students to answer in a manner not suited to simplistic or cursory statements (Byun, Lee & Cerreto, 2014).

Before starting the questioning, the teacher needs to have prepared the students, creating the rules and climate necessary for the successful implementation of controversial topics. The classroom environment or culture is an integral variant to the success of any discussion as well as beneficial to overall student achievement and success. This is a crucial component in developing critical and reflective thinking concepts, especially in a student centered, dialogic discussion format (Deal & Peterson, 1999; Harjuan, 2012; Smart & Marshall, 2013). The climate within the classroom must be conducive for all within to talk; no cliques, groups or ideas should have, or have had preferential treatment or other confirmation biases from the instructor. If so, only some voices and concepts will be heard, and the activity will have failed before it begins.

This neutrality is crucial for truly reflective and critical dialogue to take place. Students must feel safe, even when contrary views are allowed, and discussions followed. Though the teacher removes oneself

from the dialogue, it does not mean the instructor should not intervene; if the discourse is off track or becoming a management issue than it should be discontinued or put back on course as originally designed. Examples include students' hijacking the discourse for personal attacks, of which the instructor needs to be extremely cognizant. This occurs when the topic is centered on a controversy directly affecting a student or students in the class, and quite commonly unknown to the teacher.

As an example, in a student discourse while in one of my 11th grade government classes, a female participant was extremely vocal and negative towards the rights of abortion under the Supreme Court case, *Roe v. Wade*. The animosity towards women who had an abortion was apparent and her language was inappropriate. However I did not catch the tone in time and before moving on or redirecting the dialogue another female in the class, who had just undergone an abortion unknown to me, stood up and screamed obscenities at her, causing a serious classroom management issue. Needless to say, the exercise was immediately over as I reverted back to full classroom control and stopping all student dialogue. As a teacher, I missed the warning signs and allowed a 'hijacking' of my discussion to vent someone's distaste for another participant. Teachers need to be cautious of this, but the warning signs are usually there, as an inexperienced teacher and later looking back at it, I could have skillfully stopped the loss of power long before it became an issue. Be aware of passions becoming too heated for polite discourse and of language unbecoming of a classroom environment. If knowledgeable of these concepts, instead of stopping the activity especially when a student or classroom erupts, the teacher can re-direct them by using prepared prompts, keeping the class discussing while moving up or down the levels of thinking and in keeping passions from igniting or hijacking the process.

This highlights the difficulty of such discourse as critical areas of inquiry tend to be inflammatory and can lead to impassioned responses. Yet for the discussion to be effective, the issues need to play out to some degree as differing views and beliefs should be heard and discussed (Godfrey & Grayman, 2014; Mayo, 2002; Ohoa & Pineda, 2008). Some passion and feelings are necessary as students, like their adult peers, will have initial resistance to ideas and values that differ from their own. This is the balancing act for which teachers will need to learn for success in such activities. Avoiding the issues does not engender critical thinking or the understanding of others but engaging in it may create hostility and student discord. So what is the best way to undertake such an endeavor?

The understanding of control or power over the classroom is integral to the process. In the beginning, the conversation will be initiated by a single participant, in this instance the teacher. Once the subject is

defined the teacher can then allow students to engage or further question from the initial prompt, utilizing ill fitted type of questioning to spur more than a simple or spurious answer from the students (Byun, Lee, & Cerreto, 2013). Here the instructor now needs to relinquish some control, giving it to the class in the discretion of allowing the students to engage directly with each other. Typically a teacher is the sole or primary discussant, controlling the conversation tightly with questioning and prompts before selecting individual students for responses. This monologic discourse helps the teacher govern the dialogue but limits the freedom of students to fully engage. Subsequent discourse can be tightly controlled and manipulated to keep rhetoric or provocative topics and questions limited, enabling more classroom control (Harjuan, 2012). This is a common practice for many teachers as control, or lack of it, can lead to disruption and a loss of pedagogical effectiveness. For many, any other way is just too 'scary' to try.

This formal control is described as power, which is the student-teacher dynamic that continuously plays out in a classroom. This struggle over classroom dominance is perpetual, ebbing and flowing between the teacher and students who generally oppose the other (Nystrand, et al, 2001; Ochoa & Pineda, 2008). Power is not infinite however, and in giving some to the class, the teacher loses some of her own. As the dominance of the conversation turns away from the instructor, it can develop its own inertia as students will become reluctant in dis-engaging or moving away from the topic (Nystrand, et al, 2001). This is difficult for teachers but by doing so helps in the development of the dialogic discourse between the students, instrumental in developing the critical thinking necessary in better understanding of diverse views (Harjuan, 2012; Ochoa & Pineda, 2008; Smart, Marshall, & Chin, 2006). The teacher will need to give (some) control to the students through their discourse but be ready to 'retrieve' it or bring it back if necessary.

To do this effectively, teachers will need to plan ahead of the activity and include a framework to guide the discussion with limited interference or use of teacher power. This can be a template, developing a hierarchal, linear direction conducive to higher order critical thinking. A sample of this framework has been created by the author though it is by no means inclusive or rigid (See Appendix A). By using a hierarchal based template the teacher can develop 'movement' up or down the taxonomic measures while still trying to control the power struggles fluctuating during the discussion. The framework can guide the pre-arranged, ill fitted questions to maximize cognition while, at the same time, allowing for a 'release' or reduction in passion or frustration simply by moving down the scale into less inflammatory questioning, or to fitted questions if necessary.

Planning of the template needs to include indicators as to when to redirect the discussion, essentially cues or prompts for the teacher to best ‘see’ or feel when inflammatory rhetoric is taking hold. This then can then give the teacher ample time to not only defuse the situation but, still hopefully, keep the discussion on track. This can be tricky as a little bit of discord is not, in itself a bad thing, as the dissonance between prior beliefs and new learning forces the student to reconcile the two, with passion being a common by product of the process (Johnson, 2001). This frustration is common and not always a management issue, perhaps better seen as an opportunity. To ease this conundrum the teacher should plan for such and as stated earlier inject cues in the framework or lesson as to when to intercede when necessary.

Questioning Formats

Prompting is integral, and should follow prepared plans of inquiry and questioning. As seen in in the appendix, this format can be simplistic and unidirectional, visualized somewhat like a ladder or framework where the instructor can move the prompts into higher levels of cognition as defined by Bloom (Bloom, 1956; Krathwohl, 2002). Hierarchical questioning is a valuable tool in which to elevate students’ thinking through a progression of ill-fitted prompts steering discussions forward to maximize the potential of the discussion (Chin, 2006; Byun, Lee, & Cerreto, 2013; Tofude, et al., 2013).

It is not necessary for this model to be enforced rigorously as the format is simple enough to utilize different types of questioning or prompts as to move the discussion into higher or lower levels of critical thinking. If a ‘roadblock’ occurs, albeit in the forms of confusion or frustration, a teacher can address the issue or lower the level of discourse, hopefully preventing any blowback or any other type of confrontation or behavior to occur. Teachers engaging in critical thinking and controversial discussions should be prepared for such possibilities and to ‘back’ off or close the lesson to prevent any miscues or problems from emerging. They should also be prepared to move off the planned hierarchy if the discussion takes a different turn than expected as the critical thought process is the primary outcome here and should continue even if the students’ develop a new concept in which to explore (Nystrand, et al, 2001; Tofude, et al., 2013). There is recognition of the ability of student’s themselves developing prompts which, though different than that of the teacher, is still extremely beneficial to critical thinking (Byon, Lee, & Cerreto, 2013; King, 2002). In cognitive discourse, especially student led, the end product or outcome of the discussion does not necessarily need

to meet the level of metacognition, the highest level of critical thinking achievable. Many, if not most discussions will never get that far, but other levels of inquiry are still beneficial and worth achieving. And as Social Studies teachers, polite and diverse conversations among students about controversial topics are also important skill sets to pursue (Bickmore & Parker, 2014; Smart & Marshall, 2013).

For teachers, this hierarchical structure can also be useful in gauging success as a rubric or measure. For many educators this type of control and the ability to know if going 'off task' has occurred can be the safety net in which to pursue exercises that can lead to such problems, especially if the teacher is unsure or not quite willing to give more authority or control to students (Harjuan, 2012; Lennon, 2009; Nystrand, et al., 2001). Any deviations from the prompt, especially if classroom decorum or control degenerates, can cue the teacher when to reset, redirect or to close out the discussion if need be. Without such a framework critical thinking discussions can waver off task and can be harder for the teacher to control and properly direct back to a reasonable and effective discourse.

However, it doesn't always need to be hierarchical, especially if the discussion is intended to help students develop their own understanding and new directions of inquiry. A different format can be utilized when a particular outcome is not needed or possible. A circling question format, though looser in control and difficult to gauge the levels of critical thinking, is more 'open' for students in which to develop their own inquiry process, potentially developing a feedback loop of their learning (Tofade, et al., 2013). Though the educator will start the process utilizing specific prompts and questions, this type of framework is non-linear in format, allowing students to move to different levels of thinking before re-establishing an understanding and possibly a new set of questions or possibilities. This then, allows students to engage in a more holistic approach; possibly more applicable to issues and problems where an answer or resolution potentially does not exist. This format is exceptionally powerful in the constructs of politics and state geo-political discussions where no good, or right and wrong answer is possible. The format should help 'discover' concepts while allowing students to develop the discussion themselves in a manner conducive to politically positive dialogue.

Though anecdotal, the author used to offer an assignment for 11th grade government students to 'solve' the Israeli/Palestine peace process. I would set up teams, usually in pairs, give a cursory explanation of the issue and then give them a couple of days to research and brainstorm possible solutions. In some respects, I gave them an unsolvable problem. Later, in a monologic format, I would then have the teams discuss their answers out loud. After hearing their ideas I would then politely inform

them that it had either 'been tried before', 'wouldn't work because...', 'would be genocide', etc.... Students would become frustrated and inevitably lead to some grumbling or a possible outburst. At that point, the discussion would be stopped and I would take over with a directive, teacher centric form of questioning, bringing power back fully into my hands. By doing so, I would help defuse their frustration, explaining that sometimes 'painless' fixes for geo-political issues are not easily or quickly determined and perhaps, may be impossible to solve. Such is government and of history. Students, following the initial discord, would then reconcile themselves towards the intricacies of the situation and people involved with their own understanding and conceptualization of the world, developing new learning in the process (Johnson, 2001; King, 2002).

Student frustration was publically discussed as I would state this was a deliberate and desired outcome, going so far as to disclose that this would be similar in passions to the differing 'groups' we were just discussing. Further ill-fitted, critical questions would then be initiated such as 'why would this be so?', or 'do you understand the problems of each side?', discretely moving towards a student centered, dialogic discourse. This moved the power back to the students; who at this time were relatively benign of passion but eager to engage in a discussion. I would still monitor for inflammatory rhetoric as well as interjecting an ill-fitted prompt if necessary, though invariably discussion would be robust and well involved for the plurality of the class.

As seen above, the instructor will usually start at the explanation stage before going on to description or definition, whereon closed questioning ends as open, ill fitted questioning begins (Byun, Lee, & Cerreto, 2013). Students then can take the control as they try to classify or re-develop the problem before trying to solve or determine the best outcome. Usually, the outcome is also ill-fitted, which the instructor can then re-prompt, starting the process anew as students take the new information and try to re-apply it to consensus. It must be stated, however, this dialogic construct allows for students to discuss and evaluate intractable issues which can, obviously enough, lead to frustration and negative emotions. When using such a framework, it is advised to know when to call it 'quits' and to end the exercise as further discussion can lead to backlash and acrimony among the discussants. The outcome is critical thinking and collegial discussions, once achieved it is best to stop the process immediately before the negatives outweigh the positives. It may be prudent for more experienced teachers to undertake such a proposition as it is harder to control and management issues can definitely arise if passions overcome civility.

Conclusion

Teacher directed classroom discussions and critical thinking exercises are an important concept in the Social Studies classroom. By controlling the prompts and questions and by following a planned format the instructor can develop a dialogic series of inquiry whereupon students can learn regardless of being active or passive participants in the discussion. Also by controlling the direction or flow of the dialogue the teacher can steer students to the right level of inquiry or to at least help them move into higher levels of thinking. It is important to remember, however, that a resolution to the problem or issue discussed is not necessarily the outcome required or even wanted but rather the process of engaging critical thinking in an open, discussion based format. Such skills are invaluable for higher cognition and understanding.

As an added benefit, the learning of civil and engaged discourse is an invaluable trait that many of our students no longer see in their mentors or in society at large and which is paramount for a thriving democracy. The benefits of the discourse allows for more understanding and empathy of diverse views and people and can help develop positive culture and a memorable learning experience for all those involved. There is, of course, a risk that must be understood and teachers should prepare for such but to not do these types of learning activities reduces the quality of learning our children rightfully deserve.

References

- Access. (2003). *Democracy and Public Schools: Preparing Students for Civic Participation*, 3(3/4).
- Beribe, M., S., et al (Ed.). (1991). *The American heritage dictionary*. (6th College Ed.). Boston.MA: Houghton Mifflin.
- Bickmore, K., & Parker, C. (2014). Constructive conflict talk in classrooms: Divergent approaches to addressing divergent perspectives. *Theory and Research in Social Education*, 42(3), 291-335, DOI 10.1080/00933104.2014.901199
- Blank-Libra, J. (1997). *Bloom's taxonomy and journalism conjoin to improve students' questioning practices*. East Lansing, MI: National Center for Research on Teacher Learning (ERIC No. ED417411).
- Bloom, B. S. (1956). *Taxonomy of educational objectives, Handbook I: The cognitive domain*. New York: David McKay Co.
- Byun, H., Lee, J. ,& Cerreto, F. (2014). Relative effects of three questioning strategies in ill-structured, small group problem solving. *Instructional Science*, 42, 229-250.
- Chin, C. (2006). Classroom interaction in science: Teacher questioning and feedback to students' responses. *International Journal of Science Education*, 28(11), 1315-1346.

- Cotton, K. (2000). Classroom questioning. In *The schooling practices that matter most*. Portland, OR: Northwest Regional Educational Laboratory (NREL). School Improvement Research Series.
- Duke, N., & Pearson, P. (2011). What research has to say about reading instruction. In A. Farstrup & S. Samuels (Eds.), *Effective practices for developing reading comprehension* (pp.107-122). Newark, DE: International Reading Association.
- Foucault, M. (1977). *Archeology of knowledge* (S. Smith, Trans.). New York, NY: Routledge.
- Gregory, M. (2014). The procedurally directive approach to teaching controversial issues. *Educational Theory*, 64(6), 627-648.
- Godfrey, E., & Grayman, J. (2014). Teaching citizens: The role of open climate in fostering critical consciousness among youth. *Journal of Youth and Adolescence*, 43. 1801-1817.
- Harjunen, E. (2012). Patterns of control over the teaching-studying-learning process and classrooms as complex dynamic environments: a theoretical framework. *European Journal of Teacher Education*, 35(2). 139-161.
- Huitt, W. (2004). *Bloom et al.'s taxonomy of the cognitive domain*. Valdosta, GA: Educational Psychology Interactive, Valdosta State University. Retrieved September, 2007 from <http://chiron.valdosta.edu/whuitt/col/cogsys/bloom.html>
- Johnson, C. E. (2001). *Meeting the ethical challenges of leadership*. Thousand Oaks, CA; Sage.
- King, A. (2002). Structuring peer interaction to promote high-level cognitive processing. *Theory into Practice*, 41(1), 33-39.
- King, A. (1992). Facilitating elaborative learning through guided student-generated questioning. *Educational Psychologist*, 27(1), 111-126.
- Krathwohl, D. R. (2002). A revision of Bloom's taxonomy: An overview. *Theory into Practice*, 41(4), 212-218.
- Martorella, P. H., Beal, C. M., & Bolick, C. M. (2005). *Teaching social studies in middle and secondary schools* (4th Ed). Columbus, OH; Pearson.
- Mayo, C. (2002). Education by association: The shortcomings of discourse of privacy and civility in anti-homophobia education. In R. Kissen (Ed.), *Getting ready for Benjamin: Preparing teachers for sexual diversity in the classroom* (pp. 81-90). Lanham, MD: Rowman & Littlefield.
- Mehrmohammadi, M. (2004). *Toward a new conception of the educated person*. East Lansing, MI: National Center for Research on Teacher Learning (ERIC No. ED492140).
- Merriam-Webster. (2015). *Online dictionary*. Retrieved from: www.merriam-webster.com
- Moshagen, M., Hilbig, B., Erdfelder, E., & Moritz, A. (2014). An experimental validation method for questioning techniques that assess sensitive issues. *Experimental Psychology*, 61(1), 48-54.
- Nystrand, M., Wu, L., Gamoran, S., & Long, D. (2001). *Questions in time: Investigating the structure and dynamics of unfolding classroom discourse*. Albany, NY: The National Research Center on English Learning and Achievement. Series 14005.
- Ochoa, G., & Pineda, D. (2008, Fall). Deconstructing power, privilege, and silence

- in the classroom. *Radical History Review*, 102, 45-62.
- Purmohammad, M. (2015). Linguistic alignment in L1-L2 dialogue. *Language and Dialogue*, 52, 312-333.
- Smart, J., & Marshall, J. (2013). Interactions between classroom discourse, teacher questioning, and student cognitive engagement in middle school science. *Journal of Science Teaching Education*, 24, 249-267.
- Tofade, T., Elsner, J., & Haines, S. (2013, September). Best practice strategies for effective use of questions as a teaching tool. *American Journal of Pharmaceutical Education*, 77(7), 1-9.
- von Luesen, N. (2007, November). *Description grammar for discourse*. Publisher unidentified. Retrieved from Google Scholar at: <http://ncs.ruhosting.nl/noor/summary-NvLo7.pdf>
- Wang, W. (2001). *The relative effectiveness of structured questions and summarizing on near and far transfer tasks*. East Lansing, MI: National Center for Research on Teacher Learning (ERIC No. ED470123).
- Welton, A., Harris, T., LaLonde, P., & Moyer, R. (2015). Social justice education in a diverse classroom: Examining high school discussions about race, power, and privilege. *Equity & Excellence in Education*, 48(8), 549-570.
- Wilson, N., & Smetana, L. (2011). Questioning as thinking: A metacognitive framework to improve comprehension of expository text. *Literacy*, 45(2), 84-90.
- Yang, Y., Newby, T., & Bill, R. (2005). Using Socratic questioning to promote critical thinking skills through asynchronous discussion forums in distance learning environments. *The American Journal of Distance Education*, 19(3), 163-181.

Appendix

	<i>Knowledge Domain</i>	<i>Cognitive Domain</i>
1. Explain (issue or quandary) a. Overall issue b. Different parts (variables)	Factual	Remember
2. Define (parts/variables) a. Overall mission/objective (variable) b. Individual perception (variable)	Factual	Understand
3. Classify (variables by weights/issues) a. Potential conflicts/issues? b. Individual assessment/judgment c. Order/rank (variables/issues)	Conceptual	Apply Analyze
4. Re-develop (issue or quandary) a. Address benefits (positives) b. Address problems (negatives) c. Evaluate	Procedural	Evaluate
5. Determine (new strategies/constructs)	Meta-cognitive	Create

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