

The Art of Critical Thinking through a Pedagogical Approach

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Abstract

Using the Maieutic Socratic Method throughout a semester can be a useful pedagogical approach for generating critical thinking through cognitive dissonance in general education, humanities and media-related education courses. By using the Maieutic Method, many important lessons and truths can be transferred through a question and answer that aims to create cognitive dissonance and encourage independent critical thought. In essence, the student learns not by listening to the instructor, but by interacting with the instructor and other participants.

Keywords: Critical Thinking, Cognitive Dissonance, Socratic Method, Dialogue, Learning Outcomes

1. Objectives

This pedagogical approach (1) illustrates Socratic dialogue, (2) increases student involvement, (3) increases responsibility of citizen involvement, and (4) creates further understanding of others' perception.

2. Introduction and Rationale

Critical thinking, creative thinking, collaboration and communication are the four Cs the Journalism Education Association clearly states all students should know, and JEA officials say journalists should master (Society of Professional Journalists, 2015). These skills are critical for professionals in subsidiary professions, including public relations and advertising. Incorporating these skills are vital for higher education professionals and their colleagues in the secondary education ranks. Throughout higher education, more attention is directed toward learning outcome achievement as opposed to skills development. Much of the attention comes from the state and federal level in addition to accreditation organizations and task forces, such as The National Task Force on Civic Learning and Democratic Engagement (2009). Administrators are also pressuring educators to design more specific curriculums tailored to meet the desired learning outcome objectives of the institution and accrediting bodies. How instructors choose to communicate pedagogically is a subjective debate; however, Gill (1993) claims the Maieutic Socratic method, a principled thinking approach through a question and answer process, is successful in increasing principled thinking and moral reasoning development. More importantly, increasing principled thinking within a student population meets the need for learning outcomes that build citizenship through engaging critical thinking and reflection. Previous studies in sport, journalism, and general education courses suggest that the Maieutic Socratic teaching methodology can be effective in enhancing principled thinking and moral reasoning when tied to students experiencing cognitive dissonance in classroom activities, assignments, and dialogue (Grant, 2012; Steele, 2012; Barnes, 2009; Gill, 1993). Stoll (2001) suggests instructors, utilizing this pedagogical method, can foster independent critical thinking through: (1) a unique question-answer approach; (2) a philosophic, cognitive structure; and (3) a rigorous content and curriculum that requires reflective writing and dialogue on one's personal choices in specific situations.

The Socratic Method has long been a standard in many ethics classrooms, with teaching by questioning considered to be the standard. But as Grant (2012) and Leigh (2007) both explained, the Maieutic Method suggests the idea of birth as the word “maieutic” derives from the Greek word maieutikos or midwife; the method centers on teaching by engaging the student as a partner. The teacher and student reflect upon the evidence and reasons for a claim while creatively seeking reasons to test the veracity of the belief. Leigh (2007) further expounds on the form using Plato’s *the Sophist* as the grounds for the Maieutic Socratic Method, as a form of critical thinking in dialogue form. Leigh said the method should challenge participants to test a claim or theory, or some part of it, so they can better understand possible contradictions and choose alternatives. Grant (2012) claims the principle-based Maieutic Socratic Method emphasizes an alternative order of education for the student, placing personal understanding of individual moral beliefs before the institutional codes of ethics for various professions. Grant also states the teacher’s role, as the facilitator is to motivate participants in a joint enterprise toward knowledge, which includes: challenge, argument, question, discussions of all ramifications, listening, dialogue, empathy and rigorous content. According to Gill (1993), pedagogical styles similar to the Maieutic Socratic Method can be a catalyst for critical thinking development, especially in educational environments where participants feel secure and respected. NCS Pearson (2012) defines critical thinking as the composition of skills and attitudes that involve the ability to understand and diagnose the existence of problems and derive solutions for the problems. Additionally, Elder and Paul (2002) claim that if students learn to value and improve their critical thinking capacity, the proficiency may follow them into their specialized career.

King and Mayhew (2002) posit that the classroom environment is vital for students developing critical thinking skills. For example, college courses that explicitly encourage students to discuss personal values and how they affect their decisions often create cognitive dissonance and critical thinking within the participants. King and Mayhew also suggest that the manner a pedagogical style is delivered is crucial to critical thinking growth. More recently, Mayhew and King (2008) examined two courses with implied moral reasoning content. Their research, as well as Steele’s (2012), support the view that instructors need to construct a safe learning environment, where participants can engage in thought-provoking discussions, which challenge predispositions in a respectful manner. Studies (Smith & Bunting, 1999; Adams & Zhou-McGovern, 1994; Mustapha & Seybert, 1990; Tennant, 1991; Culp, 2011; Grant, 2012, & Steele, 2012) have also found that effective critical thinking pedagogy is fostered through an open, student centered discussion and requires participants to reflect, emphasize decision-making, and promote active engagement. To date, these components appear to be central in each of the successful intervention studies that push critical thinking through cognitive dissonance among college student participants.

3. The Activity

For the Maieutic Socratic Method to be effective, the instructor must be willing to facilitate discussion and be open to multiple thoughts. A crucial component is the instructor has to be prepared to take a risk by engaging in a discussion on a wide variety of issues (McNeel, 1994). By engaging participants through discussion, there is always the risk of being wrong and openly challenged. In this role, the instructor must be capable of trying new and innovative approaches that may or may not be successful. The key here is to be willing to try.

4. Using a Unique Question-Answer Approach

The Maieutic Socratic Method is structured around an interactive, interpersonal communication exchange between the instructor as a facilitator and the student as the discoverer. The facilitator needs to challenge students to use personal values to resolve moral conflicts that incite cognitive dissonance and enhanced reasoning. The pedagogical style implies that students should be required to address content issues in writing and communication that includes affect argumentation, proper listening skills, and conflict management. By engaging in dialogue, the learner becomes responsible for supporting personal beliefs and actions in both specific and general situations. The discussion should encourage participants to critique personal beliefs as well as the beliefs of others (Mayhew & King, 2008). The challenge of adopting the methodology is changing ingrained teaching styles that emphasize content as the only focus (Gill, 1993). The Maieutic Socratic Method strength is embedded in the instructor’s ability to challenge participants to argue, question, and discuss an issue and all collateral fibers. Essentially, the approach is a radical departure from the lecture, information-centered approach, which is often practiced in university classrooms; where the instructor is the center or focus of the learning experience (Gill, 1993; Hornsby, 2007; Mayhew & King, 2008) The instructor must force the participant to be involved in disequilibria, that is, in argumentation with peers, about critical issues (Stoll, 2001).

The pedagogical style helps the participant develop the skills to argue effectively and critically. The ability to argue, to dialogue is a learned skill; often students do not inherently know (Murphy, 1998). The following is a strategy to help students become more comfortable with their communication dialogue in this learning environment. Some concepts to consider include:

4.1 It is all Right to Disagree

Disagreeing about important issues usually results in arguments; such arguing is not necessarily bad, because it can be a way of trying to reach agreement through reasoning. Arguing may be bad; however, if participants are irrational or unreasonable. Yet, arguing is good if dialogue helps participants discover truth. Good argumentation can actually be considered dialogue. Dialogue is based on four specific modalities: a) listening b) effective discussion, c) assertiveness, and d) empathy (Gill, 1993).

4.2 Listening

Learning and dialogue are dependent on the ability to listen. Typically, human beings speak between 100-124 words per minute, but are capable of hearing about 500-600 (Reall, 1993). There is a distinct difference between hearing and listening. It is this disparity that causes people to experience difficulty in communication. Listening demands that one be attentive and interactive. Understanding the philosophy of interactive learning is important at this juncture. The instructor must challenge the students to develop their listening ability. If students struggle with listening, there are several suggestions that could be conveyed to enhance their listening ability. In addition, making students aware of barriers for listening development should also help enhance their capacity. Proper communication begins with good listening. Individuals, who struggle with listening, are generally affected in several aspects of life. In addition to listening, effective dialogue also is necessary for developing successful interpersonal relationships, especially in learning and critical thinking development. Class communication needs to move beyond outside stimuli. Biases, prejudice, emotions, cultural/social influences, values, religious ideation and preconceived dispositions must be overcome. Strong and helpful dialogue is dependent on the ability to listen. Nonetheless, a common misconception in this model is more communication is better; however, the silence and pauses in a conversation are equally if not more important (Stoll, 2001).

4.3 Enhancing Effective Dialogue

If students develop their listening ability, they improve effective dialogue. Effective dialogue demands that students combine theory specific to the content material. Through cognitive integration of the theoretical and content material, students are able to argue effectively, sincerely, and competently about course content. Students will then be skilled in argumentation, as well as, have an arsenal of material to address weighty individual and societal questions. To be effective in open debate, the students must have certain psychological skills—being both assertive and empathetic. Not only must the students effectively listen and systemically argue, but also demonstrate assertiveness and empathy. To be effective, students must have some working knowledge of conflict resolution. By defining conflict as two or more people whose goals and resources are not compatible, the instructor must enable students to learn proper techniques of conflict management. According to Hornsby (2007), conflict is inevitable since it is rare that two individuals agree 100 percent of the time. Conflict can be a powerful catalyst for engaging critical thinking development among students. Absence of conflict is not necessarily a positive thing when promoting critical thinking growth among classroom participants.

4.4 Developing Assertiveness

Assertiveness is the legitimate and honest expression of one's personal rights, feelings, beliefs, and interests without violating or denying the rights of others (Stoll, 1999). Assertiveness training demands that students have passionate beliefs, and know why and how each is functional or nonfunctional in society relative to the beliefs of others. Research has shown that assertive individuals are usually viewed as highly competent and effective, though not especially likable or friendly (Stoll, 2003). One of the goals of using this pedagogical method is helping students develop their assertiveness. Instructors need to probe classroom participants for passionate or controversial issues. When these topics are discovered, participants are more willing to become assertive due to the questioning of their beliefs and opinions.

4.5 Understanding role of Empathy

For assertiveness to be effective, empathy needs to be discussed at length with the classroom participants. Empathy is the ability to accurately identify and sensitively respond to the feelings and ideas of another without becoming sympathetic (Gibbs, 2003). The ability to understand other's points of views seems to "take the edge" off the assertive position and permits others to see a flesh and blood individual. The empathetic position though is highly tenuous. Students must avoid sympathetic responses or dialogue, that is, developing an affinity, or feeling of emotion, experience, relationship between persons or things, wherein whatever affects one similarly affects the other. If students become sympathetic, they can be easily manipulated and may be unable to see the complete moral picture. Assertive and empathetic training can be logically taught and fostered in the right classroom environment. Instructors need to incorporate a formalistic method of questioning and debating to foster empathetic assertiveness. The participant is actively involved in thinking and criticizing.

4.6 Improving the Learning Environment

One of the primary emphases in this paradigm is to create a learning environment that encourages critical thinking and inquiry of content between the instructor, student, as well as, the class peers. Gill, (1993) recommends that this interpersonal, interactive methodology must base the approach on an open, caring, trustful environment. With both student and instructor focusing on interactive discussion through use of active listening skills and empathetic argumentation, participants may come to appreciate divergent points of view and in the process, improve critical thinking and reasoning skills.

5. Debriefing

Towards the conclusion of each class, the instructor needs to reflect and discuss what has occurred during the exercise with participants. Throughout the reflection phase, instructors need to be patient, and provide ample time for responses to questions and probing regarding class content. By waiting for the participant to finish a thought, students know there is general interest and curiosity from the instructor. Also, listen for the main theme and supporting ideas and try to identify what is not said as well as what is presented by the participants. Remember to be accepting and control emotion when responding. By separating raw emotion from the participant responses, it permits the participants to be themselves, which can initiate cognitive dissonance and enhance the opportunity to promote critical thinking during the reflection phase (Stoll, 2003).

6. Appraisal

Participants involved with Maieutic Socratic Method will experience a different form of pedagogy that focuses on critical reasoning, which requires each to express themselves in speaking, listening, and writing. The methodology requires not only a willingness to reveal what one would do in a specific situation, but also to provide reasons for arriving at this position. The dialogue is process-centered, and the focus is on the student as a learner/discoverer (Goree, 2000). To be successful, the classroom interaction must be integrated with the experiences of the learner. This develops insights, understandings, and ability to see new relationships—thus the student develops an intimate relationship with the subject matter. More important, previous studies (Culp, 2012; Steele, 2012 & Grant 2013)) support the notion that regular dialogue and listening interactions between instructor and student, and student to student, will meet the learning outcome of citizenship and critical and principled thinking development.

References

- Adams, M. & Zhou-McGovern, Y. (1994). The sociomoral development of undergraduates in a "Social Diversity" course: Developmental theory, research and instructional applications. Paper presented at the annual Meeting of the American Education Research Association, New Orleans.
- Barnes, J. (2009). Examining the effects of an intervention program concerning sport competitive theory and moral reasoning on the moral cognitive growth of freshman. (Unpublished doctoral dissertation). University of Idaho, Moscow, ID.
- Culp, C. (2012). The pedagogy of moral reasoning of U.S. Marine Corps Lieutenants. (Unpublished doctoral dissertation). University of Idaho, Moscow, ID.
- Elder, L. & Paul, R. (2002, Winter). Critical thinking: Teaching students how to study and learn, Part II. *Journal of Developmental Education*, 26(2) 34-35.

- Gibbs, J. C. (2003). *Moral development and reality: Beyond the theories of Kohlberg and Hoffman*. Thousand Oaks, CA: Sage Publications.
- Gill, J. (1993). *Learning to learn: Toward a philosophy of education*. Atlantic Heights, NJ: Humanities Press.
- Goree, K. (2000). Teaching moral development in journalism education. *Journal of Mass Media Ethics*, 15(2), 26-36.
- Grant, T. (2012). *Comparing the SBH Maieutic Principle-Based Method to traditional case study methods of teaching media ethics*. (Unpublished doctoral dissertation). The University of Idaho, Moscow, ID.
- Hornsby, K. (2007). Developing and assessing undergraduate students' moral reasoning skills. *International Journal of Scholarship of Teaching and Learning*, 1(2). Retrieved from http://digitalcommons.georgiasouthern.edu/ij-sotl/vol1/iss2/7/?utm_source=digitalcommons.georgiasouthern.edu%2Fij-sotl%2Fvol1%2Fiss2%2F7&utm_medium=PDF&utm_campaign=PDFCoverPages
- King, P.M. & Mayhew, M.J. (2002). Moral judgment development in higher education: Insights from the Defining Issue Test. *Journal of Moral Education*, 31(3), 247-270.
- Leigh, F. (2007). Platonic dialogue, Maieutic method, and critical thinking. *Journal of Philosophy of Education*, 41(3) 309-323.
- Mayhew, M., & King, P. (2008). How curricular content and pedagogical strategies affect moral reasoning development in college students. *Journal of Moral Education*, 37(1), 17-40.
- McNeel, S. (1994). College teaching and student moral development. In J. Rest & D. Narvaez (Eds.), *Moral development in the professions: Psychology and applied ethics* (pp. 26-47). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Murphy, J. (1998). *A critical, philosophical examination of moral reasoning and moral education in current educational models and a proposition for a new, alternative, comprehensive moral education model in elementary grades 4-6*. (Unpublished doctoral dissertation). The University of Idaho, Moscow, ID.
- Mustapha, S. L. & Seybert, J. A. (1990). Moral reasoning in college students: Effects of two general education curricula. *Educational Research Quarterly*, 14(4), 32-40
- NCS Pearson, Inc. (2012). *Watson-Glaser™ critical thinking appraisal user-guide and technical manual*. Retrieved from <http://www.talentlens.co.uk/assets/news-and-events/watson-glaser-user-guide-and-technical-manual.pdf>
- Reall, M. (1993). *The relationship of cognitive moral development, moral reasoning, and moral conduct of business students in a competitive environment*. (Unpublished doctoral dissertation). The University of Idaho, Moscow, ID.
- Smith, C.A. & Bunting, C. (1999). The moral reasoning of two groups of college students. *Research in Education*, 62, 72.
- Society of Professional Journalists Education Committee (2015). *Still captive? History, Law And The Teaching Of High School Journalism*. Stillwater, OK: New Forums Press.
- Steele, S. (2012). *Community engaged service-learning: The effect on university students and community partners*. (Unpublished doctoral dissertation). The University of Idaho, Moscow, ID.
- Stoll, S., & Herman, C. (2003). *Winning in life: Secondary education*. Moscow, ID: Center for ETHICS* publications.
- Stoll, S.K. (2001). *Principled thinking. Curriculum guide*. Moscow, ID: Center for ETHICS* Publications.
- Stoll, S.K. (1999). *Moral Reasoning: What is it and how it is best accomplished in the classroom and gymnasium*. In J. Byl, & T. Visker (Eds.), *Physical Education, Sports, and Wellness: Looking to God as we look at ourselves*. Sioux Center, IA: Dordt College Press.
- Tennant, S. (1991). *Personal and moral development: A developmental curriculum intervention for liberal arts freshman*. *Dissertation Abstracts International*, 51: 2657A.
- The National Task Force on Civic Learning and Democratic Engagement (2009). *A crucible moment: College learning & democracy's future*. Association of American Colleges and Universities. Washington, DC.