Supporting an Inquiry Mindset: Resisting the Lack of Curiosity by Design Model

Juan Manuel Walker
Augusta University, Georgia, USA

Cody Cruse Harlem High School, Georgia, USA

Kim Barker Augusta University, Georgia, USA

Abstract:

As we work with students within teacher education and secondary contexts, we face an ever-growing disconnect over what should be taught or valued in the learning environment: Is it the memorization of content or the acquisition of skills related to being better citizens? As professors of social studies and literacy education and a teacher of secondary science, we introduce our students to our respective fields and task them with applying content within real-world contexts. This is not an easy task for teachers in any content area, political and social forces complicate this task. They must strike a balance between competing approaches to content implementation. In social studies these approaches can be as varied as teaching a hero narrative versus a more complex inquiry-based approach to understanding people in historical settings. With this context in mind, the purpose of this article is to advocate for an inquiry approach to teaching social studies and other disciplines in all grades through research and personal experiences.

Key words: teacher education, inquiry, student-driven design, field experience

Introduction

Teacher candidates' ability to ask questions has practical application for everyday use as a person and as a teacher. What questions should teacher candidates ask about political and community matters, about

Corresponding author: <u>JUWALKER@augusta.edu</u>

©2012/2023 National Council for Social Studies International Assembly

materials they are suggesting for self-selected reading, and about reliable sources for scientific knowledge? For starters, they should identify gaps in knowledge and information deficits where there is space for growth and learning. Therrien et al. (2009) propose that the question development process itself is key to learning. The more engaging the question, the more involved students will be in the learning process. Questions are critical to social studies for understanding the relevance of the past to the future of the learner (Fischer, 1971) and for reading comprehension in general as readers use internal questioning to propel them through texts (Harvey & Goudvis, 2017). Within our teacher education program, we expect that teacher candidates' questions be demanding enough to engage their students throughout the lesson. For example, questions that have been used in our courses are: Does Andrew Jackson deserve to be treated as a hero? Did Abraham Lincoln free the slaves for political or moral reasons? How can we use picture books that are typically thought of as "children's books" to spark inquiry into historical events?

As we have worked together with students in our teacher preparation courses and in field experiences, we have learned from one another about the ways in which we foster inquiry differently but with similar challenges and ultimately the same goal in mind: to instill in our students a value for curiosity that leads to a mindset of inquiry.

Conceptual Framework

The first step in the process of inquiry—in which students develop questions, evaluate evidence, and develop conclusions—is a tool widely advocated but seldom used effectively (Barton & Levstik, 2004). Memorization of names, dates, and places is often the first tactic of history teachers, and there is a need to remember important facts, and likewise, educators in other disciplines may be focus first on basic knowledge. But how do we convince educational stakeholders that while memorization is important, it has limited long-term educational value? Experiences and perspectives from the history classroom have much to offer educators in all disciplines.

Within any learning context, the value of questioning should be emphasized for all learners, and historical inquiry should be the cornerstone of history teaching. However, the truth of the matter is that "both academic research and our own classroom experiences suggest that teachers and students have enormous difficulty carrying out some of the key components of historical inquiry" (Barton & Levstik, 2004, p. 185). This fact is not only limited to students; this is also true of teachers. The College, Career, and Civic Life (C3) Framework for Social Studies State Standards has supported and provided a context for addressing inquiry. Barton and Levstik (2004) believe that educators may benefit from considering more principal reasons. When teacher candidates are prompted to provide questions for their lessons, the instructor is usually given questions that seem short-sighted or poorly developed.

Corresponding author: JUWALKER@augusta.edu

©2012/2023 National Council for Social Studies International Assembly

A Renewed Justification for Inquiry

During field experience a teacher candidate taught a 2nd grade class an inquiry lesson about the regions of Georgia. At no point did she ask any questions or ask the students to develop their own questions. When asked about which inquiry format she was attempting to address, she simply said, "I don't get inquiry." Later that day, another teacher candidate in a 4th grade classroom shared a similar response. For her lesson, "We are going to use inquiry for an inquiry assignment." Neither of these responses conveyed a sense of understanding inquiry.

Inquiry-Based Education

Our current educational climate puts an increased focus on 21st century skills, asking social studies teachers to build proficiency in historical thinking and problem-solving related to civics among their students. This is reflected in the current state standards, which use language asking students to perform tasks such as "identify," "distinguish," "integrate," and "describe" (Common Core). Contrasting with earlier standards, which emphasized content knowledge, these standards suggest a move towards the advancement of critical thinking in the curriculum, something which has always been of concern in education.

A need for a more student-driven design was recognized even before the implementation of Common Core in our program, and it is still something with which our teacher candidates struggle. Lasley (1998) saw an incoming paradigm shift away from the instruction-driven focus on teaching styles and making sure students look busy with assigned work, asserting instead that the best teachers are those who see learning as "less linear and as nested in student's experiences" (p. 85) and who are more concerned with posing interesting questions and getting out of the way, so students can answer them. Carpenter and Pease (2012) recognize that a quality education can only be achieved when the responsibility of learning is shared and includes student-centered questions that allow students to construct knowledge for themselves with facilitation from the instructor.

What Does Good Inquiry Look Like?

Research and the personal experiences of a number of educators provide many examples of what quality inquiry should look like. For examples, Whitlock and Brugar (2017) present the practices of two effective elementary social studies teachers to demonstrate how each utilizes student questioning to drive the content of their lessons. The most important practice they observed is that these teachers leave space in their curriculum to investigate students' questions the moment they emerge. This shows appreciation for their students' curiosity and builds an inquisitive environment in the classroom. It also encourages students to seek answers for themselves by modelling investigative practices. Hutner and Sampson (2015), while speaking specifically of science education, provide several indicators of good inquiry-based education that one could argue are applicable across various curricula, social studies included. They stress

Corresponding author: JUWALKER@augusta.edu

©2012/2023 National Council for Social Studies International Assembly

the teachers' role in creating a desire to learn. Is there an important question to answer or a puzzling problem to solve? Student thinking should be visible as they express their thoughts orally or in writing and provide evidence and reasoning for the claims and decisions they make. Before diving into content, students should gather their own data and build their own interpretations of events. In the case of social studies, this typically takes the form of primary literature sources such as diary entries, first-hand accounts, transcripts of historically significant speeches, etc. Hutner and Sampson (2015) also stress that discourse should be involved, a sentiment shared by many advocates of inquiry-based education (Grooms, Enderle, & Sampson, 2015; Llewellyn & Rajesh, 2011; Lombardi, Sibley, & Carrol, 2013; Reiser, Berland, & Kenyon, 2012). Students should work collaboratively to derive logical conclusions about the information they have gathered, using it to make claims or provide solutions to problems posed within the class. Following are some real-word examples of the development of inquiry-based learning in one social studies classroom that teachers in all disciplines may find applicable.

Authentic Practice

Why is the cafeteria such a horrible place?

During my tenure as a 7th grade geography teacher in 2002, my class embarked by accident on our first inquiry experience with no training or clue of the possible outcome for the project. The experience presented itself in an unlikely fashion: Early in the fall, a number of students in my fourth period class asked if we could stay in our classroom for lunch. The request did not seem unusual, but when the request was sent to the administrator, the response was a resounding, "No!" Reasons given included the extra cleaning for custodial staff, safety issues, and accountability.

When I shared the administrator's answer with the disheartened students, the students expressed a collective outcry of concerns about the safety of the cafeteria, such as the small space and fighting; indeed, these conditions also struck me as unsafe. One student asked if they could come up with a better plan for the cafeteria. All the students agreed that something had to be done about the unsafe space. I asked the administration if they would consider a cafeteria plan that worked within the confines of the lunch period and kept students in the cafeteria. Reluctantly, the administration agreed to listen to the proposed plan. The challenge was offered to all classes. Our 7th grade geography classes moved swiftly in groups of four to five students to develop appropriate plans for the cafeteria. All classes spent a week observing the norms and the system of the cafeteria. Beginning with a unifying question (How can we make the cafeteria a safe place for all students?), they interviewed students, teachers, and the cafeteria staff about concerns and suggestions for improvement. They read journal articles about unsafe spaces and their psychological impacts on individuals and communities. The students were no longer trying to avoid the cafeteria; now, they were trying to improve it.

After a week, the first period class had shared their entire proposal and selected a version that they thought best served the needs of our school. At this point, my only role was that of facilitator, providing

Corresponding author: JUWALKER@augusta.edu

©2012/2023 National Council for Social Studies International Assembly

resources from the library or answering questions about district policies. One student was so underwhelmed with my district policy responses that he printed the school district policy on these matters and shared them with his peers. They consolidated ideas and developed one proposal upon which the group agreed. All classes requested to present their proposal to the administration. First Period presented to the administration; after their 10-minute presentation, the administration team agreed to the plan. This was a great success for our students, but the administration had five more presentations to hear. Sadly, they felt that the plan presented made the most sense, and they saw no need to listen to the other classes. I and a few other teachers throughout the day agreed to listen to the other class proposals, so that they would not be denied the opportunity to present their plans. After careful consideration, the plan was presented to the students as a collective plan, since most aspects of all plans were considered in the new cafeteria system.

No Time for Play

The following year, my middle school students were introduced to our second school improvement plan. This time, the school improvement plan was designed to incorporate recess into our school day. The same free inquiry system from the year before was also used for this project. However, this was a more challenging exercise for my students, because they were advocating for a form of recess. Our school had discontinued recess two years earlier, and we knew that the administration had no desire to bring recess back into the school day. Despite this fact, the students assembled documents that supported their view of a healthy learning environment and that advocated for exercise to help address obesity and stress during the average school day. This time, all plans were heard by the administration, and all plans were collectively rejected.

It was difficult for the students to accept the administration's view about time restraints and losing class time for what they viewed as free time. I, however, felt that their arguments were sound. I shared with the students that I was so moved by their efforts that I incorporated a recess time during my classes for two days out of the week: If we finished early, we could go to the courts and have recess on Wednesday and Friday for 15 minutes. This was not only a great incentive for my students, it was also based on current research (Barton & Levstik, 2004). The administration found this distressing and promised to discontinue the outside playtime if students' test performance decreased, creating yet another opportunity to incentivize the students.

The Gift of Giving

During my third year of teaching, I understood the inquiry process enough to create a more ambitious assignment. This time the inquiry question was based on unmet needs of people in our community who were homeless.

Corresponding author: JUWALKER@augusta.edu

©2012/2023 National Council for Social Studies International Assembly

After each group formulated their questions, we agreed as a class on the most important question to pursue: "What can we do to help?" Based on our class dialog, I brought nine articles addressing this very question for the students to analyze in groups. The students, in teams of four to five, went to a starting station. Each station had three articles addressing ways to help the people in our community who were homeless. The first approach to helping people who were homeless was through canned food donations. The research in this area is very clear: This is an ineffective way of helping; not only is it expensive for a shelter to process these donations, it is time consuming. Another approach was through clothing drives, but the research indicated that this approach was also limited. In fact, many people who donate give clothes that do not meet the needs of those who need them (e.g., summer clothes during winter months), and in some cases, the clothing is either damaged or unusable. The last station had articles that concluded that financial donations were the best approach. As a team, each class had to come to their own conclusion regarding what to do with this information. Most classes agreed that a school fundraiser to donate funds to a shelter would be the best option. Each class used different methods of fundraising. One class held a dance-a-thon, and other classes provided raffle tickets with prizes ranging from a donated game system to being principal for a day. As a collective, we raised over \$2,000. Each class had class officers who went to the local shelter we had agreed to support with our funds.

Conclusion

By allowing students to learn in authentic environments emerging from questions that are relevant to their lives, we are developing necessary skills for an ever-changing society. Now, more than ever, including opportunities to discuss real-world problems throughout the social studies curriculum is necessary to prepare students for civic life. The students in these examples learned about geography, about making their schools and communities better by being actively involved, and about choosing how best to follow research-backed methods. These practices offered some powerful and yet feasible strategies and approaches for pursuing inquiry aims.

The most misguided assumption made by many teacher candidates is that inquiry is a simple process. In order to provide sound inquiry experiences, classroom teachers must be knowledgeable about content and confident about the process of inquiry. They also have to give away ownership of the learning experience to those who most vitally need and will benefit from the learning experience. As current and former elementary, middle, and high school teachers, and as a current university faculty members teaching social studies and literacy methods courses to our future teachers, we feel it is imperative that we help our students to see themselves as learners and teachers of inquiry not only in social studies, but in all disciplines. Like any great lesson, it all starts with an engaging essential question: "What kind of learner/teacher do you want to be?"

Corresponding author: JUWALKER@augusta.edu

©2012/2023 National Council for Social Studies International Assembly

References:

- Adams, P., & Findlay C. (2015). Transforming pedagogy and practice through inquiry based curricula: A study of high school social studies. *One World in Dialogue*, *3*(2), 28-36.
- Barton, K. C., & Levstik, L. S. (2004). *Teaching history for the common good*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Carpenter, J. P., & Pease, J. S. (2012). Sharing the learning. Phi Delta Kappan, 94(2), 36-41.
- CIRCLE. (2013). *Civic learning through action: The case of generation citizen*. The Center for Information and Research on Civic Learning and Engagement (CIRCLE): Tufts University.
- College, Career, and Civic Life (C3) Framework for Social Studies State Standards. (2015). *The C3 framework for social studies state standards: Implications for history education.* Retrieved from http://www.socialstudies.org/c3
- Daly, J. A., Kreiser, P. O., & Roghaar, L. A. (1994). Question-asking comfort: Explorations of the demography of communication in the eighth grade classroom. *Communication Education*, 43(1), 27-41.
- Feynman, R. P., Robbins, J., Sturman, H., & Löhnberg, A. (2005). *The pleasure of finding things out*. Amsterdam: New Amsterdam.
- Fischer, D. H. (1971). *Historians' fallacies: Toward a logic of historical thought*. London, England: Routledge and K. Paul.
- Good, T. L., Slavings, R. L, Khazrel, K. H., & Emerson, H. (1987). Student passivity: A study of question asking in K-12 classrooms. *Sociology of Education*, *60*(3), 181-99.
- Grooms, J., Enderle, P., & Sampson, V. (2015). Coordinating scientific argumentation and the Next Generation Science Standards through argument driven inquiry. *Science Educator*, *24*(1), 45-50.
- Harris, P. L. (2012). *Trusting what you're told: How children learn from others*. Next Generation Science Standards. <u>www.nextgenscience.org</u>

Corresponding author: JUWALKER@augusta.edu

©2012/2023 National Council for Social Studies International Assembly

- Harvey, S., & Goudvis, A. (2017). *Strategies that work: Teaching comprehension for understanding, engagement, and building knowledge, K-8.* Stenhouse Publishers.
- Hutner, T. L., & Sampson, V. (2015). New ways of teaching and observing science class. *Phi Delta Kappan*, *96*(8), 52-56.
- Kujawski, D. J. (2015). Present, critique, reflect, and refine: Supporting evidence-based argumentation through conceptual modeling. *Science Scope*, *39*(4), 29-34.
- Lasley II, T. J. (1998). Paradigm shifts in the classroom. *Phi Delta Kappan, 80*(1), 84-86.
- Lombardi, D., Sibley, B., & Carroll, K. (2013). What's the alternative? Using model-evidence link diagrams to weigh alternative models in argumentation. *The Science Teacher, 80* (5), 50-55.
- LeCompte, K., & Blevins, B. (2015). Building civic bridges: Community-centered action civics. *The Social Studies*, *106*, 209-217.
- Llewellyn, D., & Rajesh, H. (2011). Fostering argumentation skills: Doing what real scientists really do. *Science Scope*, *35*(1), 22-28.
- Perkins, D. (2014). Future wise: Educating our children for a changing world. New York, NY: John Wiley & Sons.
- Reiser, B., Berland, L. K., & Kenyon, L. O. (2012). Engaging students in the scientific practices of explanation and argumentation: Understanding a Framework for Science Education. *Science and Children*, 49(8), 8-13.
- Rothstein, D., & Santana, L. (2014). *Make just one change: Teach students to ask their own questions*. Cambridge, MA: Harvard Education Press.
- Rothstein, D., Santana, L., & Minigan, A. P. (2015). Making questions flow. *Educational Leadership*, 73(1), 70-75.
- Therrien, W. J., Hughes, C., Kapelski, C., & Mokhtari, K. (2009). Effectiveness of a test-taking strategy on achievement in essay tests for students with learning disabilities. *Journal of Learning Disabilities*, 42(1), 14-23.

Corresponding author: JUWALKER@augusta.edu

©2012/2023 National Council for Social Studies International Assembly

Tizard, B., Hughes, M., Carmichael, H., & Pinkerton, G. (1983). Children's questions and adults' answers. *Journal of Child Psychology and Psychiatry*, 24(2), 269-281.

Whitlock, A. M. M., & Brugar, K. A. (2017). How does a cowboy make money? Using student curiosities to further elementary school inquiries. *Social Studies*, 108(3), 79-86.

About the Authors:

Juan Manuel Walker - Assistant Professor, Secondary Program Coordinator, College of Education, Augusta University.

Cody Cruse – Chemistry teacher, Harlem High School, Harlem, GA

Kim Barker - Assistant Professor, Department of Teaching and Leading, Augusta University.

Corresponding author: <u>JUWALKER@augusta.edu</u>

©2012/2023 National Council for Social Studies International Assembly