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Talking Argument from Multiple Perspectives Across the Curriculum

NERAJ Review of Research in the Classroom

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Stefani Singer, my friend and University of Rhode Island cooperating teacher extraordinaire, were talking teaching over Thai food (which we affectionately call TTT) when she shared her trial and error shifts in teaching her 7th graders to write argumentative essays. Stef was spending lots of class time creating a safe space for verbal argumentation and teaching her students the language of argumentation—position claim, warrant, data, counterargument, etc (Toulmin, 1958). She had her students view media images of arguments to determine if they were convincing or not, and then had her students practice the verbal moves necessary for a successful argument (Kuhn, 2015). Next up, she had her students write argumentative essays in a writing workshop setting. With lots of scaffolded supports, peer/teacher evaluation and self-reflection, she felt her students were making great strides to be successful on their first-ever foray into PARCC English language arts testing this March.

One of the key shifts in middle and high school English language arts classrooms today is teaching students to write argumentative essays and many teachers are seeking supports on how to improve their writing instruction. Stefani Singer helped me see that one of the central tenets to this process is to allow students multiple opportunities to practice arguing, which, as you well know, is a natural talent of adolescents. Adolescents' desire for recognition, autonomy, and privileges—access to the car keys, more allowance, no school uniforms—or their innate desire to understand more global issues—racial

tensions in Ferguson, the one child rule in China, or the reasons why women in some countries must cover their hair—provide the perfect authentic purpose for writing an argument, which motivates students to write with agency and voice. The practice Stef included was to then hand them the hidden keys to successful argumentation by teaching them the language of rhetoricians.

In this column, we will not only examine the research behind using verbal argumentation to prepare students for the CCSS ELA argumentative essay but also consider how verbal argumentation can be fostered in social studies, science and mathematics classrooms to prepare adolescents for success as scholars, problem-solvers and citizens.

From Dialogue to Two-Sided Argument (Felton and Herko, 2004)

This study used structured reading, oral debate and metacognitive reflection in a writing workshop format to improve adolescent students' written arguments. The authors took a sociological perspective to determine of verbal arguments could transform into writing. Their first step was similar to Stefani Singer's: helping students indentify the elements of a two-sided argument, which are: position, claim, opposing-side claim, counterargument, rebuttal, qualification; and reservation.

The authors implemented a two-sided argument writers' workshop with students in an 11th grade humanities class. Teachers chose three important issues to debate: hate speech, abortion and gun control. After the teachers presented a 45-minute lesson on the structure of an argument and fostered students' metacognition, students engaged in conversations on each of the three topics as a pre-writing activity. Next, they used a

graphic organizer to structure reading on each issue. Two revision activities followed: 1) two-sided argument oral debate with feedback and reflection; 2) peer response to writing using a revision worksheet.

The goal was for adolescents to transform their verbal abilities in argumentation into writing and overcome three common obstacles: 1) understand and include alternative perspectives; 2) scaffold the transition from dialogue to writing; and 3) provide the necessary schema for structuring a written argument. The authors conclude that not only must we build on students' verbal strengths in argumentation and build background knowledge on the structures of argumentation teachers must also create socially and emotionally safe contexts in which argument becomes part of the natural classroom routine. Furthermore, helping students to rehearse argumentation in the classroom will help them to express and defend their opinions that will pay off in written argumentative essays.

Argumentation as Core Curriculum (Kuhn & Moore, 2015)

In a multi-year experimental design study, three classes of entering sixth graders were randomly assigned to either the two-year intervention group, one-year intervention group or the comparison class group in a course in philosophy, which focused on argumentation. Participants were predominantly Hispanic or African-American and 60% qualified for free or reduced-price lunch at a public middle school in the Harlem neighborhood of New York City.

The intervention curriculum involved three segments cleverly called the Pre-game; the Game; and the End-game. *The Pre-game* segment involved students taking

sides on an issue. During the first year, issues were those close to adolescents' experiences; whereas, in the second year, issues were extended to include a range of national and global issues. Three Pre-game sessions actively involved students in small group work to brainstorm reasons for a stance on the issue, an evaluation of the reasons, and consideration of other viewpoints on the issue. The *Game* segment lasted for 6 sessions in which students were paired with same-side peers to practice their argument with opposing-side pairs. The dialogues lasted for about 25 minutes and took place in an electronic environment using Google-chat. Pairs were asked to self-reflect and to provide peer feedback. In the *End-game* segment, students participated in 3 class sessions and were assigned an individual essay assignment. Students returned to their same-side small groups and prepared for the Final Showdown, which was a much-anticipated whole-class debate! After the debate, the teacher—referred to as a coach—guided the class through a transcription of the showdown to help students see the infrastructure of their successful and unsuccessful argumentative moves. Points were awarded and a winner was announced. You will definitely want to refer to Kuhn and Moore (2015) and the full research study (Kuhn, Zillmer, Crowell, Zavala (2013) for specific details, sample issues for your adolescents to argue, and the graphic organizers used in this innovative and effective curriculum.

Kuhn and Moore (2015) administered a post-intervention assessment, and analyzed student dialogic argument and written argumentative essays. Their findings are significant and are sure to help guide your evidence-based practice. The students who participated in the two-year curriculum had superior argument claims supported by evidence in both verbal (dialogic) and written forms. One area that still needed

strengthening for all three groups was the proportion of arguments that sought to weaken opponents' claims, which some see as the main objective of skilled argumentation (Walton, 1989). The authors note that this is also a weakness is many arguments in the public discourse, so exposing our students to more exemplars, as Stefani Singer is attempting to do, seems like a logical addition to this curriculum intervention. Lastly, Kuhn and Moore (2015) posit that argumentation is an important part of the core curriculum across all content areas and state, " Yet hardly any experts have proposed stepping outside of such boundaries [of the ELA classroom] and focusing on the skills that are common across them (as one of few exceptions, see, for example, Shank, 2011)" (Kuhn & Moore, 2015, p. 77). Next, we will turn to three content-specific research articles on teaching argument in the science, mathematics and social studies classrooms.

Representing Student Argumentation in the Science Classroom (Manz, 2014)

In this scholarly article, Manz (2014) considers the activities in which scientific argumentation practice and student argumentation practices might be incorporated in the science classroom. She reviewed the literature in this field and argues for the development, not adoption, of four key practices:

1) *Norms for argumentation practice*—These norms include students and teachers talking about shared ideas; listening to one another; revising thinking and justifying evidence.

2) Shifts in the activity system—Students participate in productive argumentation during class to challenge issues that may otherwise be taken as given, such as measures, instruments, and ways of presenting data. First, students engage in conversations to indicate agreement or disagreement, which leads to making sense of others' ideas. Next,

students and teacher determine what counts as acceptable and unacceptable disciplinary claims and find ways to agree, disagree, and make sense of scientific ideas. Finally, teachers and students negotiate the normative ways of relating, communicating, and using science-specific ideas to meet academic goals.

3) *Individual development*—Students are held individually accountable on tests in the current educational settings; therefore, it is imperative that teachers determine what individual students know and are able to do. In her review of the literature, Manz found that students engaged in argumentation improved what is called students' epistemic understanding—in other words, their overall theory of knowledge in the science domains.

4) *Supports for the development of practice*—Teachers and students need support to develop and sustain a learning environment where teachers and students use argumentation productively to develop scientific and shared knowledge.

Manz concludes with the suggestion that the Next Generation Science Standards, as well as the CCSS, require teachers to integrate disciplinary literacy best practices into day-to-day routines of the content area classroom. She sees argumentation as a public activity that has potential to help teachers create the norms, activities, and social relations found outside the classroom. Such authentic experiences are necessary for STEM college, career, and life success.

Mathematics Teacher-Orchestrated Arguments (Choppin, 2007)

Another excellent way to foster productive classroom discourse is called the teacher-orchestrated classroom argument (Forman, 2003). Current mathematics standards require students to actively engage in mathematical argumentation with expert

guidance from the teacher. Choppin (2007) defines argumentation not as a verbal competition rather as a "deliberate negotiation of a common explanation, one that supersedes and incorporates individuals' explanation" (p. 307). Using this definition, students' experiences with argumentation in the mathematics classroom can surely connect with argumentation in other content area classrooms as long as teachers help students to realize the connections.

One connection is the need to create a community of learners and establish the norms of practice, as we saw in the science article reviewed above (Manz, 2014) and in Stefani Singer's classroom. A second connection is that students have agency and voice in the classroom, which empowers them to develop confidence and competency. The third connection is that student's learn to listen to one another, to reflect and to co-construct knowledge that would likely not be possible without the distributed cognition of the group of great minds.

In the mathematics teacher-orchestrated argument the teacher "orchestrates" the student discussion in the following way:

1) "**Recruit**" students to share aspects of their good thinking while solving a mathematical equation or problem. To do this, the teacher must monitor student work prior to the discussion to look for unique ways students have approached the problem.

2) Call on students to share thinking, which provides **feedback** to students that they are knowledgeable, **competent thinkers** and establishes that in this classroom community peers are also a valuable source of information.

3) Ask students to resolve differences in the two students' thinking or approaches to discover underlying principles or concepts.

Choppin (2007) shares helpful transcripts of a teacher-orchestrated discussion that you will want to take a look at and closes his article with tips on changing teacher practice. As you know, many classroom discussions use recitation—teacher asks question, one student responds, the teacher evaluates and repeats. Learning to observe student work, determine which students to recruit and questioning students to help them discover key concepts and principles is a much more complex task than recitation. This reminds me of a saying a high school teacher taught me years ago, which I often share with my student teachers—"If you are working harder than your students, then you are not teaching them to learn." Teacher-orchestrated argumentation is one method to get students talking more about mathematics than we do, and loving the feeling of academic competence.

Next, we will consider how creating the space for argumentation in a social studies course helps to develop the critical thinkers and global citizens today's public schools hope to graduate.

Creating Civic Understanding (McMurray, 2007)

Social studies classrooms provide an ideal space for students to consider multiple perspectives, to discover the history of ways people have thought or acted, and challenge or support dissenting views with evidence-based argumentation. "Dissent has been one of the precursors to democratic change" (McMurrary, 2007, p. 49), and we learned from

the review of Kuhn and Moore (2015) that the skill of weakening opponent's claims continues to be a challenge for many adolescents.

McMurray (2007) suggests several ways to foster authentic discourse in the middle and high school social studies classroom. Here we will list methods, although the author includes several others and provides much more detail that you'll want to read about in this scholarly article.

1) Use **storytelling** to provide specific dissenting views.

2) Foster a classroom **environment** where an authentic spirit of democracy is valued and expected.

3) Teach students the **historical roots** of dissent, which have resulted in democratic change.

4) Allow students time to discuss, argue, write and **reflect**.

Closing Arguments (*pun intended*!)

The ELA CCSS writing standards call for an increase in the amount of attention we give to the written argumentative essay and the literacy CCSS call for increased attention to writing across the content areas. Teachers like Stefani Singer and the teachers in the studies reviewed in this column know that we can't just sit students down at a computer, share an argumentative essay template, show a few examples and tell them to write. In order to get our students to the critical thinking and high performance levels required, teachers must create a classroom environment for students to verbally rehearse argumentation, allow them to talk with one another and experts like the teacher for

feedback and opportunities to co-construct knowledge of how to effectively argue verbally and then in writing. The studies we have read today provide a research base to justify your practice. Even though your students will not be allowed to talk during the test, they should be encouraged to talk lots in your content area classroom. We can inspire them to express dissenting views, from multiple perspectives, and be able to provide evidence and counter-evidence to strengthen their argument. Now that's my definition of college and career readiness!

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