

Why Argue?

*Language arts, science, social studies, mathematics—
the craft of argumentation belongs in every discipline.*

Mary Ehrenworth

The last year in the United States has torn families and friendships asunder as our political process became a maelstrom of demonizing, inflammatory language, and distortion. There has never been a more important time to teach young people to suspend judgment, weigh evidence, consider multiple perspectives, and speak up with wisdom and grace on behalf of themselves and

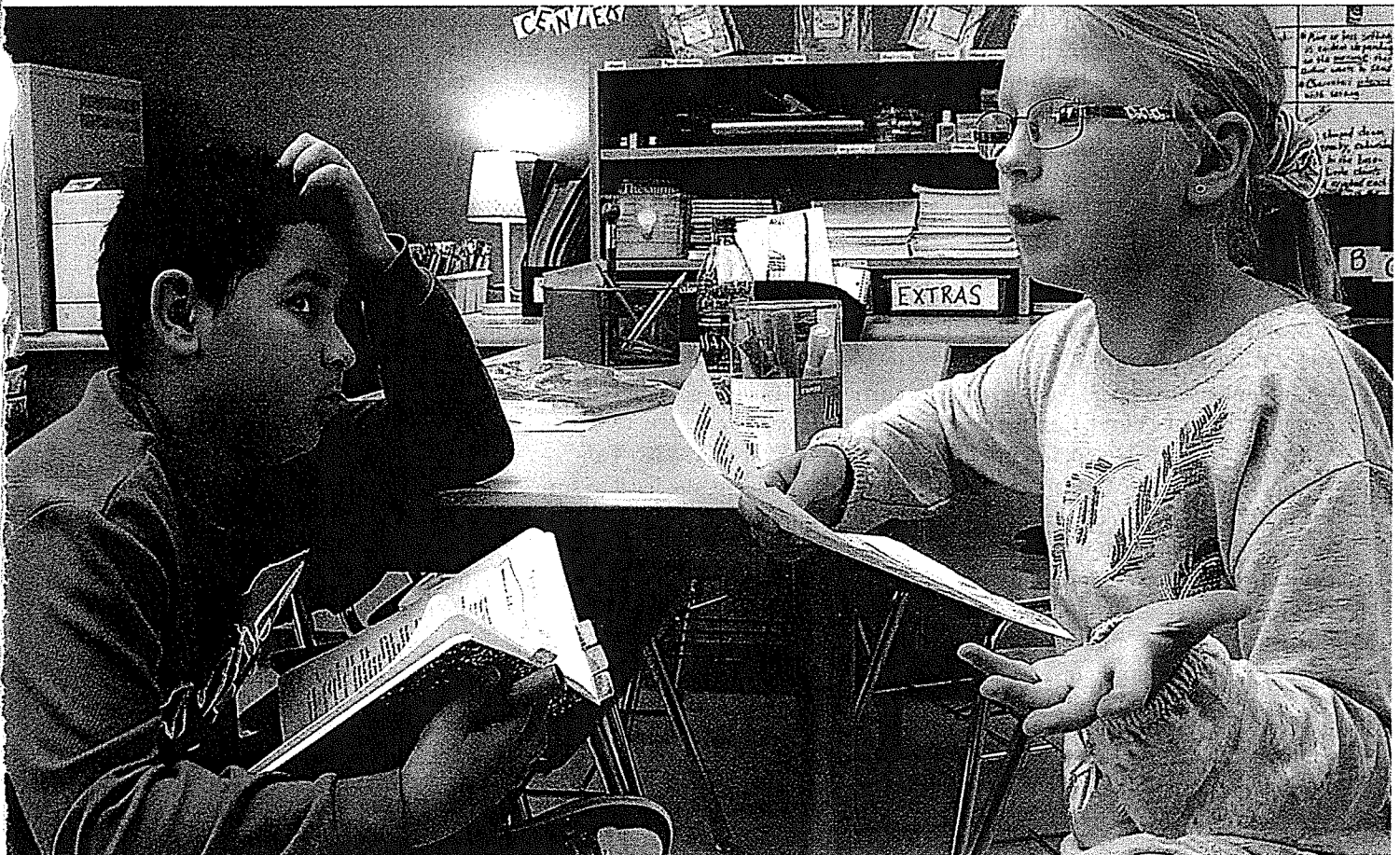
others. Now more than ever, developing students' argumentation skills is part of the work of teaching literacy.

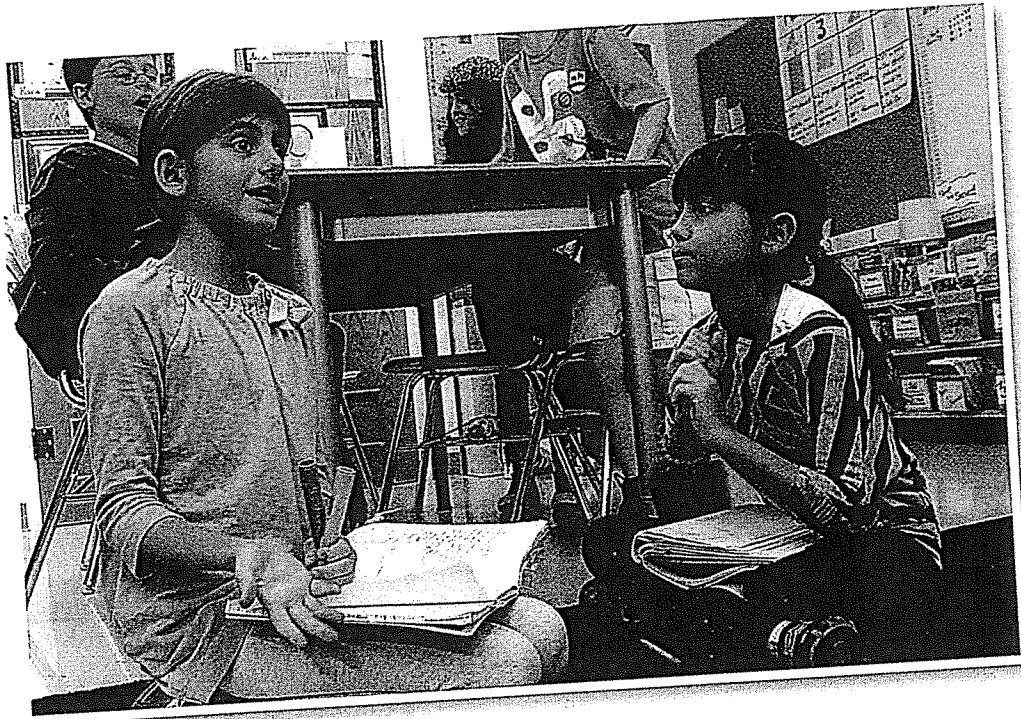
Argumentation is not just a skill for language arts classrooms—it is also a pathway to success in virtually every academic discipline. When taught well, argumentation can give students reasons to read more closely (including analyzing the logic of math, science, and social studies arguments) and help them develop more confident

academic discourse. When we give students practice in both oral and written argument, they learn to

- State a clear claim—clarifying the specific position they are defending.
- Support their claims with reasoning and evidence.
- Correlate evidence to support different ideas.
- Cite authoritative sources to bolster their argument.
- Create questions to deepen

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Left and on page 35: Students hone their argumentation skills with one-on-one flash debates.

their understanding and illuminate complexity.

- Revise their ideas and evidence to make a logical and compelling sequence.
- Lead their audience through their argument with a clear introduction and sophisticated transitional phrases.
- Consider opponents' strongest points so they can acknowledge or refute counterarguments.
- Acknowledge nuance and conditionality.

At the Teachers College Reading and Writing Project (TCRWP), we became intensely engaged in argumentation in the wake of the Common Core and as the Next Generation Science Standards were being created. We fostered think tanks, study groups, and conversations with teachers across the content areas. We worked in classrooms, designed an annual argumentation institute, and created new argument units of study in 5th, 7th, 8th, and 9th grades. We also brought

in researchers such as Deanna Kuhn from Columbia, Jonathan Osborne from Stanford, and Paul Deane and colleagues from the Cognitively Based Assessment of, for, and as Learning Initiative (CBAL) at Educational Testing Service.

It's a good time to share this knowledge with teachers in all content areas so they can engage students in powerful discussion and debate and convince them that the world we inhabit is nuanced, complicated, and fascinating. Here are some ways to help argument flourish across the curriculum in your school.

Consider Starting with Talk

To work on raising the level of students' argument writing, we might start by working on student talk. This insight came from Paul Deane as he participated in a think tank organized by TCRWP and CBAL. After all, Dr. Deane posited, a major purpose of argument writing instruction is to

develop students' logic and reasoning skills (Deane & Song, 2015; Kuhn, Hemberger, & Khait, 2016). Oral discussion provides an accessible way to begin developing these skills (Ehrenworth & Minor, 2014; Hohne & Taranto, 2014). In fact, one of the fastest ways to raise the level of students' argument writing is to raise the level of their talk—their argument discourse.

One of the most effective strategies the think tank developed was quick, one-on-one *flash debates*. Students may debate literary topics, such as whether a character is weak or strong, whether a character's decision was good or bad, or whether the story's setting would be a good or bad place to live. Students can also take sides on nonfiction topics they are researching in content areas: Big game hunting in African preserves—should it be allowed or not? Christopher Columbus—hero or villain? Which is the better historical method to achieve change—armed revolution or passive resistance? These debates often follow the "Argument Talk Protocol" shown on page 37.

Flash debating is a powerful method for quickly raising the level of students' argumentation skills. As students participate in flash debates, the teacher can circulate through the classroom and coach them on skills like stating a clear claim, backing their claim with evidence, and responding to counterclaims.

Because flash debating requires students to rehearse their arguments

by quickly expressing them out loud and testing them on other learners, it's a powerful method for developing argument writing. The skills of planning efficiently and assessing the strength of their arguments on the run will also stand students in good stead when they take high-stakes assessments like the ACT, the SAT, and advanced placement or international baccalaureate exams.

Develop a Strategic Curriculum

For your students to become highly skilled in argument, they'll need opportunities for repeated practice. So when teaching argumentation, it's important to ask yourself, When will students get another chance to practice this skill set? If the answer is "Not until next year," then students will always remain apprentices. Here's a better answer: "We'll begin our argument work this year in language arts; then we'll follow up with an argument unit in social studies, and after that, an argument unit in science, and perhaps one in math."

In this kind of strategic curriculum, teachers plan for multiple moments when they'll purposefully integrate the argumentation skill set into instruction across the disciplines. (Of course, elementary teachers can do the same kind of planning by designing a series of units that run across several of the disciplines they teach and perhaps culminate in an interdisciplinary project.)

For instance, suppose that a middle school decided that students would practice argument writing throughout the year in language arts, social studies, and science. The sequence could begin in October in language arts in a unit on literary essay writing. Students would first engage in flash debates, learning how to orally support ideas with textual evidence and to compose literary arguments

with coherent structure. Then, the essay writing unit would move on to nonfiction argument skills as students researched the pros and cons of competitive sports in schools, composed arguments, and gave speeches or panel presentations for peers, parents, and school leaders on whether competitive sports programs are an overall force for good in schools. The goal in this unit of study would be three-fold: to advance students from opinion and preferences to evidence-based reasoning; to move students from hunting for quotes to comparing and synthesizing nonfiction sources; and to solidly ground students in logical structure.

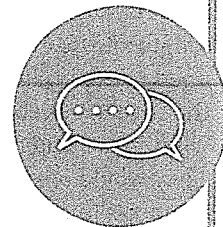
In November, social studies teachers would revisit that work and add

citation skills and critical reading skills as students researched and composed position papers. Students would learn to sift conflicting perspectives, compare sources, and cite and analyze references, drawing on the ideas of Joy Hakim (2007) and Howard Zinn (2009) to take positions on whether the American Revolution radically changed conditions for many people. Students would revisit the flash debate protocol to compose and defend preliminary positions, researching both sides of an argument and incorporating text evidence. They would also learn new skills of comparing and analyzing sources and incorporating counter arguments.

In December, science teachers would guide students in arguing which

Argument Talk Protocol

1. Name the argument.
2. Listen and gather evidence for both sides of the argument.
 - You should be able to argue either way.
 - Be alert to juicy quotes and statistics.
3. Pick a side.
4. Caucus with your side.
 - What is your BEST evidence? (Sort through and weigh your evidence to find the strongest.)
 - Rehearse your argument.
5. Face off!
 - Meet your opponent and present your argument . . . and listen to theirs.
 - You will have one minute each to present your argument.
6. Repeat back to your opponent the BEST part of their argument.
 - What evidence was most compelling or persuasive?
7. Caucus with your side again to plan rebuttal.
 - What were the opposition's strongest arguments, and how can your side rebut?
 - A rebuttal should not just be a restatement of your initial argument!
8. Rebuttal with opponent (one minute).



form of renewable energy citizens should adopt. Students would once again tackle the work of suspending judgment and researching with an open mind, finding out more about the advantages and disadvantages of wind, solar, and hydroelectric power. They would apply their flash debate protocols to rehearse and test their arguments, but they would also learn about how math and visual representations are used in argumentation, as well as arguing for an audience and considering the context and conditions under which their argument would be strongest.

This kind of curriculum planning allows complex layering of the curriculum as the skill of argumentation is revisited in many different contexts. At the same time, it frees each secondary teacher to *not* teach certain aspects of argument writing, knowing that another teacher will be adding to students' skill sets in a later instructional unit. As experienced teachers know, deciding what not to teach in each unit is as important as deciding what to teach. Putting boundaries on units of instruction makes them more manageable, sharp, and clear for both students and teachers.

Choose and Prepare the Content

For argument units to be appropriate in disciplines like social studies and science, the content must be open to legitimate dispute. You're not going to ask students to debate the pros and cons of the Holocaust, for example—there's no place for a legitimate argument. Nor, within the scientific community, is there debate about the reality of climate change. On the other hand, debating whether certain states or nations should focus on wind, solar, or hydroelectric power as sources of green energy would be an authentic argument. Debating the

Some Argument Topics Across Content Areas

These sample topics were developed by the Teachers College Reading and Writing Project (<http://readingandwritingproject.org>).

Language Arts: Literature

- Is [a fictional character] weak or strong?
- Is this story more about ___ or ___?
- Does the author develop the mood more through ___ or through ___?
- Which character has the greater impact on events: ___ or ___?
- In this story, does the setting shape the character more, or the character shape the setting?



Language Arts: Nonfiction

- Are zoos good or bad for endangered animals?
- Should we have animals in classrooms?
- Are rats friend or foe to humans?
- Are competitive sports a force for good in schools?
- Overall, are cell phones helpful or damaging in school?
- Should kids be allowed to play violent role-playing games?



Social Studies

- Was [westward expansion/exploration/World War I], overall, a force for good?
- Athens versus Sparta: Which is a better model for today's youth?
- Columbus/Julius Caesar: hero or villain?
- Under what conditions should child soldiers receive amnesty?
- Was the American Revolution "radical"—did it change conditions overall for many people?
- Was the U.S. Civil War won more through strategy, supplies, or ideas?



Science

- Which NASA proposal should be funded: space stations, asteroid mining, or terraforming?
- Bottled water versus clean tap water: Which should the United Nations fund abroad?
- Bio-engineered food sources: Encourage and fund them or ban them?
- Renewable energy: Which should we invest in: wind, solar, or hydro?
- What is the best way to limit climate change: control carbon emissions, limit greenhouse gasses, or . . . ?
- Epidemiology: Which virus is most likely the cause of ___?
- Should we protect wolves [or bears] in state parks?



merits of armed revolution versus non-violent revolution has both historical precedent and present-day relevance. (For ideas about appropriate argument topics, see “Some Argument Topics across Content Areas.”)

Once you figure out which parts of your social studies and science content lend themselves to debate and argument, here’s a tip: Put some time into developing sets of relevant texts, which students can add to as they research. You’ll save yourself frustration later if you make sure there are good texts for your students’ age and reading levels before you commit to a unit of study. Gather texts that provide a variety of perspectives, levels of nuance, and degrees of objectivity or bias. We used to avoid biased texts, but teaching students to be critical readers means that you want them to encounter flawed texts in school just as they will outside school. These texts create opportunities for you to teach students to apply critical literacy skills.

For example, in TCRWP’s 5th grade unit of study on research-based argument essays, students get a letter from their principal asking them to help decide whether the school should be serving chocolate milk. The teacher immediately brings forth some current texts that offer conflicting research on this topic, reminding students that nonfiction is not the truth, it’s someone’s perspective on the truth. One text, which they encounter early in the unit, is *Flavored Milk: Tasty Nutrition*, a video put out by the Midwest Dairy Association (www.youtube.com/watch?v=Mo3qsx05974). In it, Melissa Dobbins, a “registered dietician . . . and a mom,” compares the sugar in chocolate milk with that in other flavored drinks. There is a lot of slippery math and clever use of setting and symbolism to influence the reader. It’s a perfect text with which to teach

students critical literacies, such as asking who is represented, who benefits, how math is being used in this argument, and what is being simplified or distorted. Students return to this text later in the unit, when they have learned more about logical fallacies.

Many years of researching, piloting, and implementing argument units have taught me that strategic starter sets make all the difference in teaching argument research and writing. First, surfing the Internet is not a good use of students’ time. You want them to

Argument can foster a learning atmosphere that encourages critique, reflection, and acknowledgment of multiple viewpoints.

spend most of their time reading, critiquing, thinking, and writing. Second, if you aren’t familiar with the texts students are reading, it’s hard for you to know when they may be misquoting or misapprehending. Third, by spending a little time building a text set, you can evaluate whether there are enough texts available that represent different viewpoints. If it takes too long for you to build a starter text set, or you can’t find texts for more than one side of an argument, then it’s probably not a great writing topic for students.

Plan Laterally and Vertically

When the Common Core standards came out, many of us felt that the argument standards were both inspiring and intimidating. The thought of teaching 7th graders to formulate counter arguments, for instance, conjured up visions of student arguments that included phrases like, “on the other hand . . . and on the *other*, other hand . . .”

But it turns out that even very young students can become good at argument and counterargument, if they argue about topics they know and care about. The Reading and Writing Project’s *Units of Study in Opinion, Information, and Narrative Writing* (Calkins, 2012), for instance, describes a “Best in Show” argument lesson in 1st grade. Students bring in collections (or judge their teachers’ collections) of dinosaurs, matchbox cars, small plastic dogs, and the like. Listening to one 6-year-old defend the position

that, although bulldogs are very cute, their smushed-in noses mean they can’t play like golden retrievers, who are also cuddlier, and another argue that although the T. rex was much larger and had bigger teeth, the speed and agility of the Velociraptor made it a deadlier predator demonstrates that even small children can become adept at argument. When they know a lot about a topic, they can make a nuanced claim, address counterarguments, and even incorporate technical language.

So, you don’t have to wait until a certain grade to suddenly try to do all the work of teaching claims, logical structure, reasoning, incorporating textual evidence, and citing sources. Instead, plan vertically up the grade levels, and laterally across the disciplines. Students will benefit from this kind of collaborative, strategic curriculum planning by becoming highly confident, skilled argument writers.

For argument units to be appropriate in disciplines like social studies and science, the content must be open to legitimate dispute.

Develop Cueing Systems for Transfer

According to the late Grant Wiggins (2010), studies suggest that “students will typically not cue themselves to use all their prior learning or recognize how the ‘new’ situation reflects prior learning unless they have been given lots of training and practice in thus cueing themselves.” Wiggins found that students need explicit cueing systems to help them transfer skills from one part of the curriculum to another, or from one learning experience to a fresh situation. They also need practice in applying those skills independently.

Cueing systems for transfer make a huge difference in supporting student independence with high-level argument skills, especially when students are part of the process of creating, sorting, and applying these tools in fresh situations. Such cueing systems might include the following:

- Teacher-made charts that record the major reading and writing strategies that are taught in an argument unit of study.
- Student-made charts and tools that capture the strategies and steps they use to research, rehearse, and compose evidence-based arguments.
- Teaching tools that support students in specific skills and strategies, such as those that might be used in small-group work and conferences.
- Mentor texts by published writers that highlight specific argument skills.
- Exemplar argument texts by student writers at various levels, from novice to expert.

■ Writing checklists that help students self-assess and set goals (for example, see the “Argument Writing Checklist” at www.ascd.org/el0217ehrenworth).

Although these tools are designed for student use, they can also help teachers communicate with one another about what they’re teaching. When a science teacher can duck into a language arts classroom to see what students have learned there about reading, evaluating, and writing arguments, she’s better poised to reinforce that instruction. If she brings records of that instruction into her own classroom, students are more likely to use those same strategies as they begin to read and write science arguments. And if that science teacher then passes along to language arts and social studies teachers the tools she has created in her classroom . . . you can see where this is going. It’s going to a place of high-level collaboration—a place you and your colleagues want to inhabit.

Provide Opportunities for Argument

Stanford researcher Jonathan Osborne (2010) noted that “Research has demonstrated that teaching students to reason, argue, and think critically will enhance students’ conceptual learning . . . This will only happen, however, if students are provided with structured opportunities to engage in deliberative exploration of ideas, evidence, and argument” (p. 464).

In short, students don’t become extraordinary thinkers, debaters, and

writers because of inborn abilities. Argument, which has a powerful place in every discipline, provides a unique opportunity for teachers to develop these qualities in their students. ■

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This article is dedicated to Kathleen Tolan, senior deputy director of the Teachers College Reading and Writing Project, whose work was to argue on behalf of literacy and of children.