

7-1-2010

# Applying Toulmin: Teaching Logical Reasoning and Argumentative Writing

Lesley A. Rex

*University of Michigan - Ann Arbor*, [rex@umich.edu](mailto:rex@umich.edu)

Ebony Elizabeth Thomas

*Wayne State University*, [eethomas@wayne.edu](mailto:eethomas@wayne.edu)

Steven Engel

*University of Michigan - Ann Arbor*, [sjengel@umich.edu](mailto:sjengel@umich.edu)

---

## Recommended Citation

Rex, Lesley A., Ebony Elizabeth Thomas, and Steven Engel. "Applying Toulmin: Teaching Logical Reasoning and Argumentative Writing." *English Journal* 99.6 (2010): 55-61.

Available at: [http://digitalcommons.wayne.edu/coe\\_ted/2](http://digitalcommons.wayne.edu/coe_ted/2)

This Article is brought to you for free and open access by the Teacher Education at DigitalCommons@WayneState. It has been accepted for inclusion in Teacher Education Faculty Publications by an authorized administrator of DigitalCommons@WayneState.

# Applying Toulmin: Teaching Logical Reasoning and Argumentative Writing

*The authors explain a method for teaching written argument they used successfully with alternative high school students.*

**F**rank I. Luntz, a political consultant and pollster, has made a successful career out of crafting the language of political debates. He encouraged the Republican Party to speak about “death taxes” rather than inheritance, or “estate taxes.” This shift in language altered the public’s stance on this topic. While Americans were nearly split about taxing inheritances or estates, nearly three-quarters of them were opposed to a government tax on death (Luntz 164). Though we admire Dr. Luntz’s skill with language and his keen awareness of audience, we are tired of sound bites that masquerade as sound arguments. We think it is time to reinvigorate prevailing notions about critical thinking in English language arts. How we logically relate ideas and information to argue well has been given short shrift at a time when distinguishing between pundits who are haranguers and careful thinkers seems especially important for the future health of our democracy.

With this in mind, we refocused our teaching and curriculum on developing students’ ability to create and articulate soundly reasoned arguments. We wanted to promote their capacity to engage big ideas, important questions, and complicated problems. By this, we mean that we wanted students to start by putting ideas, questions, and problems into words, and mulling them over so they could see them from different angles and reason their way through to where they wanted to stand. Then, having decided their position, we wanted them to persuasively argue their case in talk and writing with pertinent evidence and explanations. This ability to interrogate and create not just a stance but also evi-

dence and warrants is crucial for a productive and informed public.

In what follows, we explain the framework we used and describe how we taught reasoning to students at an alternative high school, where we recorded what happened. Some of those records, including student work, lessons, Web resource links, and teaching videos, can be found at the Michigan Argument Research Group website, where Steven is designer and webmaster: <http://sitemaker.umich.edu/argument/home>.

## What Students Taught Us

The students in this project taught us that adolescents already understand and respect argument in ways useful to English teachers, but that they need help with understanding and performing reasoning in the ways we want. Young children know that some ways of using words will get them what they want and others won’t (Scollon), and they use language to persuade in their self-interest. By the time they reach high school, and even earlier for quite a few, students can evaluate arguments made to them—such as infomercials, magazine advertisements, and their parents’ expectations. And, they can assess their own competence in performing arguments for particular purposes and audiences. Some can argue their way out of getting into trouble with their parents or obtain the use of the family car, and others astutely know the limits of their persuasive skills. They have repertoires of particular forms and styles of argument for particular purposes and audiences.

Students' knowledge reminded us that our task is *not* to teach them how to argue, or even the importance of argument. Rather, our challenge is to convince them to argue in writing in an academic fashion. Most often this is not the way they argue in their lives outside of school. So, our task is to relate how we want students to argue in school to their own experiences as arguers and their desires for themselves. In other words, we have to be better persuaders as well, and we need to give reasoning a more central role in English language arts.

### What Is an Argument?

To provide a useful framework for teaching argument in persuasive essay writing, we modified the work of Stephen Toulmin. An explanation of the six elements of his original model is viewable at [http://sitemaker.umich.edu/argument/toulmin\\_argument\\_model](http://sitemaker.umich.edu/argument/toulmin_argument_model).

Toulmin's way of viewing argumentation—as the process of setting out a logical series of ideas that appear persuasive to readers or hearers—made sense to us. One way of thinking about persuasiveness is to view it as reasoning that explains how something is, was, should, or could be. When we are persuaded, it is because an explanation fits the way we understand given our situation. However, because each of us can occupy many situations and understand in multiple—even conflicting—ways, making sense and being persuaded is complicated. Nevertheless, we can represent this complexity with simpler descriptive frameworks.

Each discipline (e.g., law, philosophy, or English language arts) may have its unique definition of argument with different specific requirements, but it is possible to view all effective arguments in all disciplines according to the basics of Toulmin's model. The closing argument of a criminal trial, a formal proof in mathematics, or a teenager's impassioned plea for a later curfew all require the speaker to take a position, offer compelling data, and explain the grounds, or underlying assumptions and reasoning links, that connect these data to the speaker's position.

### Writing an Argument

The basic framework we used focused on three critical components: stance, evidence, and warrant. Writing an argument begins with taking a **stance**,

or a deliberate way of looking and/or feeling toward something for a particular purpose and for specific readers. A writer can assume multiple stances. People who want to argue effectively first consider where to stand, and then they intentionally put together ideas and information to persuade readers of their position. They link these ideas and information together through reasoning in a particular manner they assume will convince their audience. To be powerful, reasoning requires ideas and information, or **evidence**, purposefully selected to fit. With stance, purpose, and readers in mind, the argument writer selects the most powerful evidence and, with it, **warrants**, or justifies, the stance. Writing warrants to explain how evidence substantiates the stance of the writer gives the argument its persuasive power. Arguments are won and lost on well-reasoned—that is, well-written—warrants.

**Students' knowledge reminded us that our task is *not* to teach them how to argue, or even the importance of argument. Rather, our challenge is to convince them to argue in writing in an academic fashion.**

#### WHAT DO WE MEAN BY STANCE?

Three questions can help one deliberately choose a stance to take for a particular situation with specific readers:

1. **Point of view:** *How do I see and understand what I'm looking at?*
  - What in my experience makes me care about this issue, idea, circumstance or condition?
  - How does this way of caring influence me toward thinking about it?
  - How does my relationship with my readers and my current situation influence where I stand?
2. **Claim:** *What is true and should be known about this subject?*
  - What is important to understand about this issue, idea, circumstance, or condition for this situation at this moment?
3. **Request:** *What should readers understand about this subject?*
  - What would or should readers think is important?
  - How would or should they feel?
  - How would or should they act?

**WHAT SHOULD WE KNOW ABOUT EVIDENCE?**

Evidence that is believable and convincing should satisfy four conditions:

**1. Is the evidence credible?**

*Does the evidence match your readers' experiences of the world? If not, does the evidence come from a source that readers would accept as more knowledgeable or authoritative than they are?*

**2. Is the evidence sufficient?**

*Does the argument provide enough evidence to convince the readers? Consider the profiles of different readers and how much evidence they would require to understand the applicability of the evidence.*

**3. Is the evidence accurate?**

*Is the evidence valid or trustworthy? Are the sources quoted authorities in their field? Are statistics gathered in verifiable ways from good sources? Are quotations complete and fair (not out of context)? Are facts verifiable from other sources?*

**4. Which order of evidence is best?**

*Evidence should be arranged in the order that seems most reasonable so as to be most forceful. Each piece of evidence should gain strength as it builds upon previous evidence creating a forceful argument. Why is one ordering of evidence the best of all the options?*

Taking into account the situation and audience for one's essay is crucial to putting into play the three components in teaching written argument. Even a written argument is a conversation. As with all conversations that matter, trust that what is being said is "true" is necessary, so teaching students the importance of validly representing and not intentionally manipulating evidence is key.

**What Are Warrants?**

Warrants—the explicit reasoning that links the evidence and the stance—are the most difficult of the three elements for students to understand and to write. Likewise, as teachers we find warrants the most difficult to teach because we are asking students to put into language their subconscious prior thinking and a form of thinking that is new to

them. Asking why one order of evidence is better than the others is a useful way to engage student writers in articulating their subconscious reasons or warrants so they can put them in writing.

Effective warrants persuade readers of the connection between the claim being made and the evidence. Teaching students to write those connections involves asking them questions that require the students to talk through their reasoning until they internalize those questions for themselves. For novice writers of arguments, that takes practice. They must develop the disposition to write out their reasoning. By querying the reasoning underlying their choices of stance and evidence, and by articulating for themselves other possible relationships between their stance and evidence, students can write effective warrants. For example, we could ask student writers the following:

What were your reasons for selecting this evidence for this stance?

Why did you think this particular piece of evidence was well suited to your stance?

How does this piece provide evidence that is different from other evidence sources you selected?

How are pieces of evidence you have selected related to each other?

Writers can think of many relationships between their stance and pieces of evidence—far too many to teach directly without limiting students' reasoning options. However, a common example of a reasoning relationship is "if . . . then." For example, an English teacher could take the stance that rap belongs in the high school English curriculum. One piece of evidence could be the results of a survey showing that rap is urban adolescents' favorite choice of music. Another bit of evidence could be the promotion of rap as a valid literary genre alongside traditional poetry. An "if . . . then" reasoning link between these could be written as "If rap were brought into the English classroom alongside traditional literary forms, students would be more interested in participating and learning." If this were an essay, the writer's next task would be to elaborate that reasoning link in a way that makes it meaningfully persuasive for his or her particular readers. It requires the writer to keep asking why? Then again,

OK, why? And, how do I write that? That is the writing challenge, and what makes the difference between a strong, persuasive argument and a weak or nonexistent one. However, it is the part of the essay writing process that gets shortchanged in teaching, and is often not even addressed.

### Teaching Argument in the Classroom

We took these ideas to the alternative high school students to see their response to this way of thinking about argument reasoning as they moved from writing on-demand for standardized testing to writing *considered* essays that went through several revisions. Lesley has written about these different ways of essay writing in her recent book (Rex and Schiller), and we wondered how challenging this kind of writing would be for students who found high school writing difficult.

We selected students who would most likely be least interested or skilled in producing written arguments according to our framework—eleventh-grade English students at an alternative, “last-chance” (their own description) high school who were prepping for their high school diploma exam. For two months, Lesley and Ebony met with the students as a class, in groups, and individually during 13 75-minute sessions. We had copies of the essays they had previously written as examples of their essay writing, and most of those essays were less than a page and some were less than a sentence. Taking students’ reading and writing abilities and limited interest in the task into account, we chose the 2007 movie *Stomp the Yard* as the core text.

*Stomp the Yard’s* competition, romance, and inspiration had high appeal. Two young women had already memorized sections of dialogue. The film tells the story of DJ, a student at a historically Black university who pledges a Greek-letter fraternity and goes on to succeed in love and schooling after earlier being involved in a dance-off that results in his brother’s death. We viewed each episode in *Stomp the Yard* over a number of days, pausing between each to interpret what was happening and what that meant, so students could develop and write their stances and collect evidence. After they had written a stance and a list of evidence points, Lesley met one-on-one with students and in groups

to talk them through the plans for writing their essays, while Ebony provided individual and group coaching during the drafting phase.

### How Students Argued

When Lesley explained she wanted the students to draw from what they already knew to learn a particular way of arguing for writing essays, the vocal students showed what they could do. They argued by (in their own language) “getting up in each others’ faces” or (in our language) asserting the correctness of their stances. They raised their voices, increased their pitch and emphasis, and gestured in ways that demanded their point of view be accepted.

To manage the ensuing confrontations, Lesley took on the role of “argument police” or “floor director.” At first she allowed students the floor when they could state a clear stance; then again, when they could also provide evidence that suited their stance; and, finally only when they could provide a warrant as well. Because any number of students might be talking simultaneously and with different capacities to articulate stance, evidence, and warrant, these sessions were far from calm orchestrations. Volume remained high, but so did participation. When the time was right, Lesley stepped in to point out a student’s successful performance, and students kept tussling for the floor. As in most classrooms, some students stayed quiet and watched intently, but they all watched the film and wrote appropriate responses in their notebooks. To see an example of one student, Douglas, claiming the classroom floor to argue for his stance that Victoria Secret models are much sexier than women dancing in rap videos, go to: [http://sitemaker.umich.edu/argument/arguments\\_are\\_everywhere](http://sitemaker.umich.edu/argument/arguments_are_everywhere).

**After they had written a stance and a list of evidence points, Lesley met one-on-one with students and in groups to talk them through the plans for writing their essays, while Ebony provided individual and group coaching during the drafting phase.**

### One Student’s Story: Adrian

All the students faced challenges with writing arguments. We can’t include all their essays here, but

one student's drafts provide an example of what learning to reason aloud did for his writing. Adrian was a student for whom stating a stance remained difficult, even though he continued to argue that he had evidence for one. A charming 16-year-old, he talked rapidly in streams of words. Fluency wasn't his problem. Nor did he lack for clever and thoughtful ideas. Adrian had plenty of them but found it difficult to arrange them on the page with clarity or the kind of logical sequencing needed for formal writing. All the language necessary for writing rhetorically sophisticated academic arguments was coming out of his mouth, but he needed instructional help to manage it.

### Adrian's First Essay

Here is the essay Adrian wrote before we started. The on-demand prompt was *Should students have to have a C grade point average in school in order to get a driver's license?*

I think that whoever came out is just dumb because there are not a lot of people that can read or write therefore the would not be able to drive and I thought we all are supposed to be treated equal and if I can't get a C because I can't read and that means I'm not being treated equally

Adrian wrote this single draft essay in 30 minutes, without feedback or assistance. We don't think it's worthwhile to assess the writing capabilities of students on the

**A generation of Adrians who reason insightfully and argue convincingly could have a transformative influence on our social and political landscape.**

basis of such performances. Nonetheless, we offer Adrian's draft as an indication of the type of essay writing he produced before he learned how to reason as he wrote. We also want to point out that it is possible to jump to the conclusion from this draft that

Adrian does not have at his command basic conventions of sentence structure, punctuation, and spelling. Nor does he seem to have a sense of the conventions of academic writing, as indicated by the rambling, conversational tone and mechanical errors. The arguing-Adrian we heard and the arguing-Adrian we read had some features in common—bursts of ideas not conventionally segmented

and sequenced—yet there were some differences. The fluency, thoughtfulness, and purposefulness he exhibited in speech were missing in his writing. Adrian's writing did not adequately represent his thinking capacities, which could be elaborate. Our challenge was to get him to represent his thoughts on paper as reasoning.

### Adrian's Revised Draft

The following draft represents Adrian's writing from a different prompt after conferencing with Lesley and drafting with Ebony. This is not Adrian's final essay, but a draft that still needs some revision. Despite the need for some revision, the draft demonstrates that Adrian has greatly developed his written expression of reasoning: his draft has a clear stance, plenty of evidence from the movie, and it states warrants appropriately.

DJ was a selfish guy and his brother died because of it, but now he's a team player. If it wasn't for him DJ's brother would still be alive. I say that DJ at the beginning of the movie is dancing selfishly and not for the team and that is what got his brother killed. He realizes that being on a step team or a dance team is not just for him, others are on the team too win also. Dancing is a team thing and he realizes that.

DJ says that if it wasn't for him his brother would still be here. Early in the movie, DJ and Duran were at this dance battle out of there home town. Both teams had put up money and the winner gets that sum of money. DJ and Duran's team had won, but then DJ was like double or nothing. Nobody on the team wanted to go on but they did because the team didn't want DJ going out there by himself. DJ's team demolished the other team and won again. The opposite got mad because they'd lost and followed DJ's team out. They started to fight and in the process of fighting DJ's brother Duran got shot and died. If DJ and his team went of went home after the first dance, Duran would still be alive.

DJ starts to go to college because that's what his family wants him to do and his brother. DJ soon joins a fraternity and starts to step. Later of the steeping he's doing it for his brother and for his teammates. At the beginning of the steeping he's doing it for him self. But now he's learning how not to be selfish. He's building a family

with his new dancing partners and during the process he shows them some different type of dance moves and he is contributing to the team in non-selfish way and he is making them a better team.

The step team is practicing in the pool and DJ knows they're going to lose with these dancing moves. So he shows them something hot and new. The new steppers like it but the old ones didn't. So the leader was like let's settle this tonight at the dance floor. DJ and the leader dance and DJ lost because he didn't follow the steps, he did his own thing. Then his teammates told him it is not just about you and that makes everything click for him. DJ was like I want to be part of the team now.

The step team makes it to the National Championship but not DJ because of something that happens but he does come and dances his butt off. During the process DJ says that man come on it's for you and you always wanted it, but the step leader says no it's team thing and were going to do this. DJ goes out and does his brother's finishing move and everybody is excited and DJ and now not selfish no more he is a team player. DJ won because of his brother's move. At first causing his brother to die, to contributing dance moves to his step team and using his brother's moves he's not a selfish guy no more, and his life will be much easier.

### How Adrian and His Classmates Learned Written Argument

Adrian's draft is a written record of the reasoning he was urged to do, without any direct instruction or correction of what he was putting on the page. We regard it as proof that argument reasoning suitable for persuasive essay writing can be taught, even to students for whom most kinds of school writing are a struggle. We are not claiming that it is easy or even attainable without the kind of focused attention that Adrian and his classmates received. But we think it is important to be reminded that such learning is possible.

In-class, small-group, and one-on-one practice were what it took for students to learn written argument. In addition to class time when Adrian's desire to get and keep the floor motivated him to put his divergent thoughts into concisely stated and linked ideas, his fellow writers encouraged him

to see what was working and revise what wasn't clear. In his tutoring sessions, Adrian performed the difficult work of writing his stance in a single sentence and explaining how his evidence fit. Lesley questioned him repeatedly, telling him to write when he articulated a clearly worded idea. When he had too many ideas to keep track of, he recorded them into a tape recorder and played them back so he could hear and organize, with Ebony's oversight, what he had said.

Adrian and his classmates helped us learn how to teach them to write persuasive arguments in the form of an essay. As a group they showed us that students can already reason in the ways they need to reason when they are writing academic essays, but they don't know how to articulate that reasoning in ways that are conventional for academic purposes. They need patient and persistent, well-targeted guidance. They also showed us something else that we weren't expecting: Even when students' writing is marked by severe problems with grammar, punctuation, and syntax, these problems to some degree improve when reasoning is attended to. Clearer sentences emerge along with transitional devices, commas, and periods. Even spelling improves. Of course, Adrian needs to do more to his first draft to bring it in line with our expectations, but it's on its way, which he, and we, found incredibly satisfying and encouraging.

To learn to write well-reasoned persuasive arguments, students need in situ help thinking through the complexity and complications of an issue, making inferences based on evidence, and hierarchically grouping and logically sequencing ideas. They rely on teachers to make this happen. A generation of Adrians who reason insightfully and argue convincingly could have a transformative influence on our social and political landscape. Our democracy would benefit from fewer angry political rallies where people speak only with those they agree with and more Town Hall meetings where citizens, like Adrian, represent their own interests as members of a community of diverse individuals with varied, well-reasoned positions. 

### Works Cited

Luntz, Frank I. *Words That Work: It's Not What You Say, It's What People Hear*. New York: Hyperion, 2007. Print.

## Applying Toulmin: Teaching Logical Reasoning and Argumentative Writing

Rex, Lesley A., and Laura Schiller. *Using Discourse Analysis to Improve Classroom Interaction*. New York: Routledge, 2009. Print.

Scollon, Ronald. *Mediated Discourse: The Nexus of Practice*. New York: Routledge, 2001. Print.

Toulmin, Stephen. *The Uses of Argument*. 1958. Cambridge: Cambridge UP, 2003. Print.

**Lesley A. Rex** is professor in the School of Education at the University of Michigan where she co-chairs the Joint Program in English and Education and researches English classroom interaction. She has taught high school and middle school English, university composition, and English teacher education while assisting with the direction of the South Coast Writing Project, the Oakland Writing project, and the Michigan Classroom Discourse Group. Her most recent book with Laura Schiller is *Using Discourse Analysis to Improve Classroom Interaction*. Email her at rex@umich.edu. **Ebony Elizabeth Thomas** is assistant professor of reading, language, and literature education at Wayne State University. A former Detroit Public Schools teacher, her research interests include adolescent literatures and literacies, discourse analysis, and English language arts classroom interaction. She may be reached at eethomas@wayne.edu. **Steven Engel** taught English and drama at Brighton High School (Rochester, New York) for 14 years. Currently, he is a PhD student in the Joint Program of English and Education at the University of Michigan. His research interests include plagiarism and originality in the digital era. Email him at sjengel@umich.edu.

### READWRITETHINK CONNECTION

Lisa Storm Fink, RWT

In "Finding Common Ground: Using Logical, Audience-Specific Arguments," students generate arguments from opposing points of view in a hypothetical situation, discover areas of commonality through the use of Venn diagrams, and construct logical, audience-specific arguments to persuade their opponents. Students also role-play with classmates to refine their arguments. <http://www.readwritethink.org/classroom-resources/lesson-plans/finding-common-ground-using-938.html>

### My Poem, Those People (The first of three marches from Selma to Montgomery, in 1965, is known as "Bloody Sunday.")

It's almost impossible to think,  
let alone to write a single line  
without attracting, out of thin air, an impostor  
whose scheme is to find some entrance, to be given  
more than a small part in my poem, one who thinks  
something ought to be written about *him*. or maybe,  
*her*, wanting me to write them as *a dashing devil*, as  
*a delicate darling*, with a bright red, heroic heart.

But look! Who are those brave, yet desperate  
people, dark as the drab world distended about  
them gathering like ants at the foot of the Edmund  
Pettus Bridge? Some slump, but with stoic faces,  
agate eyes, tongues laden with songs  
that are sweet enough to die for.

Before, I didn't know horses could be so  
hurried, or dogs could be so drawn. They  
are mostly children whom uniformed men  
stand ready to kill. But those kids have  
more heart than hounds, more brain than  
all those horses, and enough soul to shed  
blood that is needed to solidify a nation  
that a world might no longer neglect "all  
men," no matter they labored, died like mules,  
and signed their names with all of those Xs.

—Willie James King  
© 2010 Willie James King

**Willie James King** is a poet, educator, and actor. A native of Orrville, Alabama, he has taught French and English at community colleges and high schools in Alabama. He also spent a season as an actor with the Alabama Shakespeare Festival. In addition to *At the Forest Edge*, he is the author of *Wooden Windows* (Austin: Sulphur River Literary Review Press). His poems have appeared in numerous journals, including *Crazy Quilt Quarterly*, *Hawaii-Pacific Review*, *Obsidian*, *Pembroke Magazine*, *Southern Poetry Review*, and *Willow Review*. He is a Pushcart Prize nominee.