Exploring Argumentation and Writing in the Disciplines: The Roles of Learning to Argue and Arguing to Learn in Acquiring L2 Academic Literacy

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Organization of Talk

1. Review Writing in the Disciplines (WID)

2. Review Core Ideas Concerning Argumentative Writing (AW)

3. Explore the Role(s) Argument Can Play in Promoting Writing in the Disciplines

4. Concluding Comments

Introduction

As I'll discuss later, argument appears to play an important role in the writing that takes place in many disciplines. Thus, there is a need for students to learn about argument as it relates to their chosen discipline.

What is not so clear is how the crucial links or connections between argument and disciplinary knowledge, as well as writing in a discipline, are made. It may be assumed that students can learn about the relationship between argument and writing in their discipline merely by reading writing in that discipline. If so, that may be a faulty assumption. And if that assumption is not made, this does not ensure that the appropriate connections are being made. Thus, it's important to talk about those connections.

Another area of interest is the extent to which the full potential of argument as a means of learning about writing in the disciplines is understood and addressed.

Also motivating this talk is concern about how second language (L2) writers learn about writing in the disciplines and, at the same time, build their academic literacy skills.

Through this presentation, then, I hope to generate more discussion of the relationship between argumentation and writing in the disciplines, and, in the process, contribute to discussions of the development of academic as well as disciplinary literacy, especially as related to L2 writers.

1. Defining Writing in the Disciplines

In this part of the presentation I'll take a brief look at what "writing in the disciplines" means as a way of contextualizing later sections of the talk.

“At the University of Tennessee, many courses include writing as a central component. While many academic papers may share similar goals, however, each discipline has unique expectations and requirements for successful writing. For example, writing for a Philosophy course can be *very* different than writing for English, and writing for a science class can be completely different than writing for a humanities class.” (University of Tennessee Writing Center).

“WID grew out of the recognition that while some aspects of academic writing are common across academic fields (e.g., that claims should be appropriately supported and sources properly cited), there are major differences as well. Because academic writing is not one thing, it cannot be taught generically. So if our students are to become better writers, and if they are to learn how to better employ writing as a learning tool, they will need to be instructed from within the particular discipline.” (Thompson Writing Program, Duke University)

“Writing in the Disciplines instruction helps students to develop rhetorical skills in the kinds of reading and writing that they will do in their scholarly and professional lives. WID pedagogies work to demystify the writing process and to contextualize textual practices, particularly within the genres significant to the modern research university where knowledge-making and knowledge-sharing are central activities.” (University of Lethridge Academic Writing Program)

“Writing in the disciplines is founded on an integrative relationship between writing and knowing” (Carter, 2007, p. 386).

“In most national educational systems, students’ writing development plays an important—though often unacknowledged—role in the crucial transition from secondary school to university. There is a great deal at stake, for both individual students and the societies involved, in how and how well students write. In most nations, whether students can enter and remain in higher education—and thus move into positions of greater responsibility and status in society—depends in large part on whether and how they have developed their writing” (Foster & Russell, 2002, p. 1).

“Increasing access to higher education has sparked a world-wide interest in writing development, and many nations have begun organized efforts to address the perceived problem…Writing development is now an international effort” (Foster & Russell, 2002, pp. 38-39).

“In the United States, students specialize (choose a major) very late compared to students in other nations. Students in many countries (such as France and England) specialize as early as age sixteen or seventeen, in the second two years of secondary school. U.S. students are admitted to a university rather than to a department [unlike many other countries]. U.S. students aren’t expected to choose a profession until late in their higher education—or even until graduate school or entering the workforce. Late specialization provides a longer period of general or liberal education and a curricular space for general composition courses that can teach a wider variety of genres than those of one specialty.” (Foster & Russell, 2002, p. 8)

“Early specialization, by contrast, allows for a greater focus on the genres of one or a few disciplines, which brings students more quickly into a deeper engagement with the discourse of the field. There is no clear space for general composition courses, and any formal university writing instruction (many systems have little or none) must come from within the disciplines or in special student support units (similar to U.S. writing centers).” (Foster & Russell, 2007, p. 8)

“European educational systems (which are largely the models for African and Asian systems) have emphasized earlier specialization and selection, and the ways students write in a discipline (or two or three) are crucial.” (Foster & Russell, 2002, p. 12)

In a recently published (2015) article in the journal *Written Communication*, Kruse reviews the history of writing in the disciplines as well as important differences between what he characterizes as the "Anglo-American" and "Continental" contexts.

As Kruse (pp.331-332) explains, “Historically, the academic writing of students has been profoundly shaped by the seminar, a pedagogical practice that was introduced to teaching at the beginning of the 19th century in Germany. Seminars were founded to actively engage students in research by making them study original sources and write seminary papers on their investigations and the discussion in the seminar group. Seminars were thus part of the change from an orally-conceived teaching system to a writing-based system that relied on autonomous, interest-oriented learning with minimal external control…Seminars initiated students into the craft of knowledge production and into the discourse practices of their respective disciplines.”

Kruse (p. 332) goes on to distinguish the “seminar paper” from the “research paper.” He sees the seminar paper as more common in Continental contexts and says that it is “more deeply integrated into the existing research but less directed toward solving a problem or answering a single research question,” the latter of which is more common in the Anglo-American context in the form of the research paper.

Examples of Argument in the Disciplines

Drawing on the context established so far, it's helpful to look at the relationship between argument and the disciplines. This will lead into the rest of the presentation, where the focus is on argument as a tool in disciplinary-based writing instruction.

Science

Scientists test hypotheses and arrive at claims based on the tests conducted. “In order to accomplish this task, scientists make observations, identify patterns in the data, then develop and test explanations for those patterns. In constructing an argument, scientists attempt to establish the acceptability of the explanations that they have developed. Studies of scientists doing science indicate that this goal is accomplished by coordinating supportive or contradictory evidence with a particular explanatory or descriptive claim for an observed phenomenon….Thus, in order to generate a scientific argument, an individual must learn the kinds of claims scientists make, how they advance them, what kinds of evidence are needed to warrant an argument, and how that evidence can be gathered and interpreted given community standards.” (Sampson & Clark, 2006, p. 655). [The Toulmin model of argument is central.]

History

Argumentative writing is rooted in critical thinking and the ability to interpret historical artifacts.

A thesis or conclusion is presented, with reasons given in support of the thesis/conclusion based on the evidence provided. The author attempts to persuade the audience of the strength of the thesis/conclusion.

The historian synthesizes evidence by establishing relationships between the various pieces of evidence in the process of creating reasons supporting the thesis/conclusion. **The essence of the argument is the quality of the reasons generated**.

Philosophy

Philosophers are interested in developing “proofs.” The objective of a proof is to persuade the audience of the **logic of the claim or conclusion** being offered. “The reasons offered with the argument are called ‘premises’, and the proposition that the premises are offered for is called the ‘conclusion’”(Mckeon, IEP).

“A typical use of an argument is to rationally persuade its audience of the truth of the conclusion. To be effective in realizing this aim, the reasoner [author] must think there is real potential in the relevant context for the audience to be **rationally persuaded** of the conclusion by means of the offered premises” (McKeon, IEP).

Economics

Economists focus on building a case for a particular principle or set of principles that can be used for the analysis of economic behavior within a specific economic context.

"Economists use mathematical models and statistical tests and market arguments" (McCloskey, 1998, p. xix) to support the claim(s) arising from the principle or principles that constitute the case.

Summary

Here's what I've tried to show so far:

- That there is considerable variation across disciplines in terms of how 'knowing' is represented when writers in those disciplines attempt to present knowledge in the key forms of claims, evidence, and reasoning.

- That argument plays an important role in the disciplines. This, in turns, foregrounds the importance of argumentative writing and thus the importance of being able to teach argumentative writing.

A third important conclusion arises from a comment made by Sampson and Clark (2006, p. 660) in their analysis of studies investigating students' attempts to write scientific arguments: "Structural analyses of arguments have made explicit the difficulties students encounter in marshaling evidence, drawing on their conceptual understanding of the topic, and composing arguments in support of a scientific knowledge claim."

It seems to me safe to assume that students in other disciplines encounter similar difficulties, including L2 writers. This situation heightens the need to take a close look at argumentation and the teaching of it, as I'll do in the remainder of this presentation.

2. A Look at Argument and Argumentative Writing

Let me first of all do a bit of definition work.

The term “argument” has been defined by many people in many places, leading to some confusion, particularly in terms of the actual purpose of argument.

Of special interest is the relationship between truth and persuasion.

"…the point of argument is to discover some version of the truth, using evidence and reasons. Argument of this sort leads audiences toward a conviction, an agreement that a claim is true or reasonable, or that a course of action is desirable."

"The aim of persuasion is to change a point of view or to move others from conviction to action."

"In other words, writers or speakers argue to find some truth; they persuade when they think they already know it."

(from *Everything's an Argument*, by Andrea J. Lunsford & John J. Ruszkiewicz. 2004. Bedford/St. Martin's)

Looking further at this important distinction, Kinneavy and Warriner (1993, p. 305) explain that “In a persuasive essay, you can select the most favorable evidence, appeal to emotions, and use style to persuade your readers. Your single purpose is to be convincing.”

According to Hillocks (2011, p. p. xviii), “Argument, on the other hand, is mainly about logical appeals and involves claims, evidence, backing, and rebuttals” in attempting to show readers that a claim is valid and sheds light on truth related to the context involved.

Hillocks (2011) goes on to assert that in persuasive writing, the author begins with a claim or conclusion and then finds evidence to support it. By contrast, in argumentative writing, the process is reversed: the author investigates evidence concerning a topic of interest and develops a claim or thesis after critical analysis of that evidence. Thus, the evidence leads to the claim.

Historically, the emphasis was on persuasion, especially as articulated by Aristotle in his famous *Rhetoric*.

Another crucial point arising from Aristotle's work was an emphasis on logic and the use of logical reasoning in persuading an audience of a particular conclusion or point of view.

In the Western world, a significant change took place in 1958 with the publication of Stephen Toulmin's book, *The Uses of Argument*. Toulmin shifted the emphasis away from persuasion by articulating what he saw as three crucial elements in the formation of a convincing argument. As explained Yagelski and Miller (2004, p. 31)), these were:

Claim: The conclusion or the main point being argued.

Data: The evidence supporting the claim. Also called the reasons.

Warrant: Basic principles or assumptions that connect the data and the claim.

The claim-data-warrant approach, or what has sometimes been called ‘simple argument’, has been supplemented by a more involved model (articulated in the 2003 version of Toulmin’s *The Uses of Argument*) that adds a focus on two additional elements—counterclaim (points challenging the author’s claim) and rebuttal (counterarguments or refutation of the counterclaims). Also known anecdotally as “complex argument’, the latter model gives writing teachers two options to select from: simple argument or complex argument, especially as related to their discipline.

However it's approached in the writing classroom, argument matters. As Newell et al. (2011, p. 273) explain:

"Acquiring argumentative reading and writing practices reflects a key component of recent curricular reforms in schools and universities throughout the United States and the world as well as a major challenge to teachers of reading and writing in K-12 and college writing classrooms."

These curricular reforms are the result of two important points:

The ability to gain command of argumentative reading and writing skills is especially important in the 21st century.

Studies show that students struggle in their efforts to learn how to read and write argumentatively.

In an important 2011 edited collection, *Learning-to-Write and Writing-to-Learn in an Additional Language*, Manchón makes a useful distinction between three views of writing:

Learning to Write (LW)

Writing to Learn Content (WLC)

Writing to Learn Language (WLL)

The first (LW) involves learning about writing itself through, say, a writing course, whereas WLC involves "learning disciplinary subject-matter in the content areas," while WLL means "engaging in writing as a tool for language learning" (p. 4).

For our purposes today, the distinction between LW and WLC is especially valuable, as it shows how writing can be seen from two very different directions: as an end or product (LW), or as a tool (WLC).

This distinction can be extremely helpful in looking at argument and writing in the disciplines, especially with respect to L2 writers.

Newell, Bloome, and Hirvela (2015), in a book-length account of a study of 33 secondary school English language arts classrooms with respect to the teaching and learning of argumentative writing, articulate a view of such writing that resembles the LW/WLC dichotomy. Adopting what we call a "social practice" view of argumentative writing, we assert that "A social practice approach does not isolate the teaching and learning of argumentative writing from the social context of the events within which writing is produced and the social contexts of the use of those written texts. Argumentative writing does not exist in the abstract as an idealized set of procedures and/or structures, nor does the pedagogy for teaching and learning argumentative writing." (p. 18). This is where a valuable connection between argumentative writing and writing in the disciplines can be made.

Building on this social practices orientation, in our 2015 book and our current study of argumentative writing instruction in secondary school classrooms, we draw a distinction between “learning to argue” and “arguing to learn.”

Learning to argue, like learning to write, involves acquiring knowledge related to producing written arguments. As we explain, “Learning to argue can be viewed as becoming socialized to particular social and communicative practices in particular social settings. From this perspective, teaching students to write an argument is not a technical matter, but a matter of socializing students to act, think, value, feel, and use language in particular ways that are shared with others” (p. 19). Thus, students learn to write the kinds of arguments accepted within a particular discipline.

Arguing to learn, on the other hand, involves using the techniques and understanding acquired during learning to argue to employ argument as a heuristic device. That is, argument now becomes an analytical tool, rather than a product, employed to help learners better understand and make use of different sources of information. Already equipped with an awareness of argumentative components such as claim, data, and warrants, students can then use argument to enhance their understanding of disciplinary content. In this regard, arguing to learn operates like writing to learn content (WLC).

In short, we view argument as a way of knowing and not strictly as a means of presenting knowledge, with both learning to argue and arguing to learn contributing to understanding of a discipline's way(s) of knowing.

In our view, then, we see argumentatively oriented instruction as starting with learning to argue and moving to arguing to learn. The learning to argue portion of instruction provides valuable scaffolding for later applications of argument in the arguing to learn phase of instruction.

At the same time, we believe that learning to argue and arguing to learn are mutually informing. That is, there is a bidirectional or reciprocal relationship between them, so that there is not a rigid or clear-cut distinction between them. They contribute to each other.

3. Exploring Learning to Argue and Arguing to Learn within a Writing in the Disciplines Framework.

Drawing from the previous few slides about learning to argue (LA) and arguing to learn (AL), argument could play two key roles in helping students acculturate into the writing expected of them in their chosen discipline.

Let me now add to the discussion a group of students I've not referenced much until now: second language (L2) writers.

For these writers, learning about a particular discipline in the L2 can be a challenge in itself.

An even more complex layer is added when argumentation is included in the mix, as argument is culturally driven to some extent. For instance, different cultures will have different notions of what signifies appropriate or compelling evidence. Logic, too, can be conceptualized differently. A "logical" argument in one cultural context may be considered illogical in another.

Here the scholarship of John Hinds may be relevant. In work he did in the 1980s comparing writing in English with writing in Asian languages, Hinds (1987) developed the distinction between what he called “reader responsible” and “writer responsible” writing. This is also an important distinction between indirectness and directness in thinking and expression.

“Reader responsible” writing, which he said was characteristic of Asian languages, works on the idea that it is the **reader’s** responsibility to work out the meaning of a text, not the writer’s. Thus, reader responsible writing emphasizes indirectness. Readers have to “read between the lines” to determine what is actually meant, and that is the role they’re expected to play by a writer as a text is composed. Being direct is seen as treating readers in an insulting way, because it suggests that they are unable to generate meaning on their own. Indirectness is a sign of respect toward the reader. This notion of responsibility has important implications for argumentative writing. For instance, the author may expect the reader to see connections between a claim and evidence.

By contrast, “writer responsible” writing is that in which the **writer** is responsible for making meaning as clear and direct as possible. In this type of writing, the reader has little responsibility (except in the case of literary texts); the writer does the work, including helping readers clearly see how a piece of evidence presented supports the claim being made. Directness in thinking and expression is the key principle here.

The reader versus writer responsibility issue can complicate L2 writers' efforts to learn to write argumentatively in the L2 as well as to develop higher level academic literacy skills.

Pedagogically speaking, then, teachers may face an added challenge when bringing L2 writers into the domain of disciplinary writing, as there is also the need to help these writers understand the nature of writing within a target discipline. This includes how argumentation operates within the writing of that discipline. These writers need to learn what argument means in the context of that discipline while also acquiring disciplinary content knowledge in order to equip themselves to write well as a member of that discipline's community. Meanwhile, the teacher benefits from knowing students' relationship to the reader-writer responsibility issue.

In the work being done by the argumentative writing research team I'm part of (which looks at L1 and L2 writers in the secondary school setting), we view arguing to learn and learning to argue, collectively, as a way of engaging in thinking and reporting on that thinking. This view can be transferred to the writing in the disciplines context and help ease L2 writers into that discipline and the writing expected within it. What argument can do is help these writers think (and write) as members of their chosen disciplinary think (and write).

Learning to Argue

One way to address the issues just identified is to include in a disciplinary writing course or seminar a focus on what it means to conduct an argument (in writing) within that discipline. This learning to argue stage could include the following steps:

● Identifying a dominant model (or reviewing a few dominant models) of argument as it pertains to that discipline. For instance, it appears that the Toulmin model discussed earlier plays a key role in scientific discourse. Economics, by contrast, seems to involve a number of models, e.g., the Keynesian model. This identification process could include drawing attention to specific features of the model as well as its fundamental orientation (e.g., to persuade or to pursue truth as it relates to that discipline).

● Breaking down the various components of the argument model and exploring their meaning within a specific disciplinary context, such as (in the Toulmin model) claim, data (evidence), warrant. This would involve looking closely at what represents an effective claim within that discipline, as well as what counts as important data or evidence, followed by the types of warrants that apply to a discipline. In this way students become acquainted with what might be called the architecture of a discipline's model of argument.

● Analysis of these components as they operate within important examples of disciplinary writing within the target discipline would help reinforce students' growing understanding of argument as it relates to that discipline.

● As with perhaps any course where writing is taught, some element of practice will also be essential in the development of learning to argue within a writing in the disciplines context. This practice could take many forms. Such practice could be accompanied by some form of assessment of students' knowledge and understanding of argument as it is employed within a particular discipline.

As students participate in the learning process just described, they are learning how to think and write in the ways associated with their disciplinary community. For instance, in learning to argue, they are also learning the **logic** of that discipline as encoded in the various components of argument it employs, such as claims and evidence. Understanding how argument operates within that discipline facilitates understanding of the way members of that community think, or know.

Arguing to Learn

Equipped with the disciplinary knowledge gained through a learning to argue stage, students can now put argument to use as a means of better understanding content within their discipline. Learning to argue has prepared them for this stage by equipping them with important understanding as well as interpretive devices they can use to decode disciplinary content.

Using argument as a heuristic device or tool for studying the content of their discipline can enrich students' understanding of that content. Instead of merely acquiring decontextualized facts and other pieces of information related to the discipline, students can use arguing to learn to understand what knowing itself means in that discipline because the search for such understanding is being guided by the 'tool kit' acquired through learning to argue. In short, the effort to understand and appreciate disciplinary content is not random.

For example, while reading texts in their discipline, they can construct arguments as a means of interpreting and understanding the source texts. This could entail making and supporting claims about the author's intent in the text, or the core meaning of the text, or how arguments are constructed within a text, with warrants used to connect their claims and evidence. Through this approach they can deepen their understanding of the discipline's content and of the properties of its texts. Thus, they are arguing for the purpose of learning, not for the purpose of arguing. Argument is a way into the discipline's texts and its ways of knowing.

As they engage in the arguing to learn process just described, these L2 writers are also **rehearsing** the argumentative moves necessary to engage in argument-based disciplinary writing. For example, when writing claims, they can write them in the manner accepted by that discipline, such as a hypothesis as in the case of science, a proposition as in the case of philosophy, or an interpretive conclusion as in the case of literary study.

A potential benefit of this arguing to learn approach is that it heightens or enriches the L2 learner's contact with the target discipline content by making their engagement with that content more purposeful. Instead of reading for comprehension with no guiding principles at work, these learners, utilizing the structure imposed by the focus on argument, are better positioned to make meaningful sense of the target discipline discourse. They are arguing their way into learning and into writing.

4. Concluding Comments

As I've already shown, writing in the disciplines is a specialized way of knowing and of writing, with argumentation playing an important role in the knowing and the writing.

In their attempts to learn the target disciplinary content as well as the logic which guides its use of argument, L2 writers (and perhaps many L1 writers) may be well served by the notions of learning to argue and arguing to learn briefly articulated in this presentation. These notions, especially when seen as operating in a complementary way, may provide the kind of structured guidance that L2 writers can benefit from when working within a writing in the disciplines framework.

By engaging in the dual processes of learning to argue and arguing to learn, L2 writers are able to approach disciplinary content and disciplinary writing from different angles. The combined input from these two processes provides them with a foundation to operate from as they move forward in their engagement with writing in their target discpline.

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