

Using Isocrates to Teach Technical Communication and Civic Engagement

Journal of Technical Writing and

Communication

2015, Vol. 45(2) 134–165

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DOI: 10.1177/0047281615569481

jtw.sagepub.com



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Abstract

Building on work by Dubinsky, Haskins, and Simmons and Grabill, this article explains how a technical communication instructor used Isocrates and informal usability testing to help guide a service-learning project involving the One Laptop Per Child XO-1 notebook. For the project, engineering students received feedback from peers and elementary school teachers to determine the feasibility of using the XO-1 with at-risk children aged 6 to 9. Despite initial positive impressions, the service-learning students discovered that the XO-1 was not suitable in this situation. This article discusses Isocratean theory and how his ideas can inform a pedagogy of civic engagement in technical communication.

Keywords

Isocrates, technical communication pedagogy, civic engagement, classical rhetoric, service-learning, usability, One Laptop Per Child XO-1 notebook

To speak and think well will come together for those who feel a love of wisdom and of honor.

—Isocrates, *Antidosis*

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Introduction

In the past decade, digital technology has played an increasing role in civic engagement and service learning, especially in the field of technical communication. In their landmark article, “Toward a Civic Rhetoric for Technologically and Scientifically Complex Places,” Simmons and Grabill (2007) discuss this trend and the need to integrate more rhetorical theory and empirical research into this type of work. Without rhetorical theory and empirical methods, they argue, it is difficult to foster collaborative knowledge building between civic and academic stakeholders. More recently, Getto, Cushman, and Ghosh (2011) assert that a lack of theoretical grounding and collaborative knowledge building—in what they call digital mediation—can exacerbate rather than eliminate the ivory tower hierarchy that threatens college–community relationships. When discussing technology and knowledge building in local communities, they argue, “it’s important to remember that digital mediation and its grammars can unintentionally distort, disembody, and decontextualize the very cultural lifeways that it strives to protect and represent” (Getto et al., 2011, p. 173). Teachers of technical communication, therefore, are faced with a number of challenges when integrating technology and civic engagement into their courses.

Building on work by Dubinsky (2002), Haskins (2004), and Simmons and Grabill (2007), this article explains how I used Isocrates to teach technical communication and civic engagement in a project involving the One Laptop Per Child (OLPC) initiative’s XO-1 notebook. The OLPC has been distributing the XO-1 to at-risk children overseas since 2005, and in 2008, I saw a possible connection between their efforts and the needs of socioeconomically challenged populations in greater Lafayette, IN. The project involved teachers of local, at-risk students aged 6 to 9. These teachers provided feedback on the XO-1 to electrical and computer engineering students in one of my courses at an R-1 University, Purdue University. This feedback helped determine the feasibility of using the XO-1 laptop in local elementary school classes. Despite initial positive impressions of the XO-1, the service-learning students discovered that the notebook was not suitable in this situation. In taking a collaborative approach to knowledge building, informed by Isocrates and usability testing, my students discovered that a sophisticated piece of technology they found beneficial was not the best solution to problems facing an at-risk population.

This article suggests that integrating Isocrates into the pedagogical framework of civic engagement can help technical communication students better understand their rhetorical situations and the approaches necessary for collaborative knowledge building. I should note that this article does not attempt to undermine other theorists in favor of Isocrates. Rather, the article argues that technical communication teachers should *include* Isocrates in their pedagogy. Lastly, the article asserts that using empirical methods can act as the process by which collaborative knowledge building takes place. The goal of this piece is

to explain the theories and practices my students and I followed so that others might replicate similar work.

Limitations in Civic Engagement

In the past 20 years, writing studies has accomplished much toward fulfilling university commitments to local communities. The field has collaborated with global and neighborhood partners, integrated this work into pedagogy, and formed bridges between educational institutions and people outside academe. Also, writing studies is expanding the number of service-learning classes, matching the increase in civic engagement at colleges and universities (Jacoby & Associates, 2003, p. 2). But despite this progress, mixed results from community-based projects continue to spark debate. Community members can be disappointed with deliverables, students wonder about the value of working with local neighborhoods, and scholars note a lack of theoretical and empirical grounding for civic work. It is not surprising that scholars have continued to call for more work (Dubinsky, 2002, p. 61; Eyler, Giles, & Schmiede, 1996, p. 77; Simmons & Grabill, 2007, p. 439).

Scholars also underscore the difficulties of measuring the impact of service pedagogy and measuring students' awareness of benefits related to community engagement. Herzberg (1994) admits, "I don't believe that questions about social structures, ideology, and social justice are automatically raised by community service" (p. 309). Reflecting on Herzberg's work, Schutz and Gere (1998) write that his "students were not energized into social action by their experiences" because the project did not foster sustained and reciprocal engagement (p. 131). Scott (2004) states that most service-learning classes

End up providing...interesting contexts for teaching the sociorhetorical pragmatics of technical communication, but they don't adequately convert these contexts into opportunities for teaching students to recognize, critique, and respond to the ethical implications of their work. (p. 297)

Such limitations illustrate the difficulty of integrating civic engagement into college writing courses. More recent publications from Flower (2008), Kahn and Lee (2001), and Brizee (2014) speak to these issues, but more work is needed.

The theoretical challenges noted above tend to be exacerbated when teachers try to integrate technology into service-learning. In my classes, students who are positively influenced by technology find it hard to believe that computers cannot solve most problems. Moreover, communities outside the technology bubble of the university often do not have access to advanced technology, nor do they know how to use it. Grabill (2007) points out that even if communities can access technology, they may not know how to turn information they find into actionable knowledge.

The project I discuss here addresses these challenges to civic engagement by positing a theoretically driven, collaborative approach for integrating service learning and technology into technical communication pedagogy. This approach draws on theories outlined by classical rhetoricians. The importance of using these theorists to foster closer collaboration between college and community is worthy of further exploration, as Deans (2010) has argued: “Isocrates, Cicero, Quintilian, and a host of others speak of the need to connect rhetorical practice to civic responsibility . . . a central concern of contemporary service-learning theory and practice” (p. 104).

This article also responds to Isocrates specialists and classical studies scholars who have called for reconsideration—and application—of his work. These scholars (Depew, 2004; Dunne, 1997; Garver, 2004; Haskins, 2004; Johnson, 1959; Leff, 2004; Poulakos, 2004) note how well Isocrates’ theories align with contemporary approaches to teaching, writing, and civic engagement. Isocrates’ epistemology, which I argue combines knowledge building, nonhierarchical methods of organizing information, and performance-oriented *phronesis*, also aligns with theories from contemporary scholars in writing studies who call for participatory models of *praxis* (see Asen, 2004; Cushman, 1996; Simmons & Grabill, 2007; Sullivan & Porter, 1997). I maintain that these scholars’ theories align with Isocrates’ ideas of pedagogy, *polis*, and performance—what Haskins (2004) calls a *mimesis* “of civic education” (p. 7).

Classical Rhetoric, Technical Communication, and Service-Learning

To address some of the limitations outlined above, some technical writing scholars look to classical rhetoric. In his article, “Service-Learning as a Path to Virtue,” Dubinsky (2002) establishes the framework for such an approach. Dubinsky notes the links between classical rhetoric and technical writing as he underscores the “strong connection between my field and classical rhetoric extolled by classical rhetoricians (e.g., Aristotle, Quintilian, Isocrates, Cicero)” (p. 61). Using classical rhetoric as a foundation for teaching technical writing, Dubinsky argues that the ancients model a pedagogy that prepares young people for work in the *polis*. He builds off of this classical approach to assert that service-learning provides students with experiential learning outside the “market-driven focus” often used in professional communication. Dubinsky writes, “Thus, we see our goals for implementing service-learning as similar to those of Isocrates and Quintilian: we want to teach a useful skill set, but we also want to inculcate a sense of civic idealism” (p. 62). Dubinsky, however, only briefly mentions Isocrates and, instead, turns to Aristotle, Cicero, and Quintilian to integrate classical rhetoric into service-learning and writing pedagogy (p. 62).

While Dubinsky (2002) and a number of writing scholars look to classical rhetoric as a base for service learning and outreach, they tend to focus on Aristotle, Cicero, and Quintilian. Echoing Haskins (2004), I posit that we

should also include and apply Isocrates. Beginning in the 1950s, classicists were noting that Isocrates' methods might prove effective for teaching rhetoric, writing, and civic responsibility. When discussing Isocrates' lessons, Johnson (1959) notes,

History, political science, geography, ethics, literary studies are included in the curriculum . . . inevitably, these studies were taught not for their own sakes as they are in a modern university, but for the help they could give to a rhetor in making decisions or influencing an audience. Being ancillary to rhetorical composition, the subjects were covered as composition required. (p. 29)

More recently, Poulakos and Depew (2004) state, "Isocrates was a more central figure in discussions of civic education, and especially the role of rhetorical training in civic education, than Aristotle ever was" (p. 2). Isocrates' absence from discussions of civic engagement is notable considering that he dedicates so much of his work, *Antidosis*, to connecting rhetoric with civic discourse and involvement in the *polis*. Haskins (2004) contends that Isocrates' "educational program presented rhetoric as a way of training students to be active citizens. By making artful discourse integral to culture and politics, Isocrates promoted an idea that education and civic life are inseparable" (p. 4).

Nevertheless, writing studies has generally taken Aristotle as the architect for civic discourse despite Isocrates' contributions (Poulakos & Depew, 2004, p. 1).

Isocrates as a Model for Collaborative Knowledge Building

Including Isocrates in contemporary models of civic engagement is fitting because his work with rhetorical theory and pedagogy focuses on preparing young people for life in the *polis*. Isocrates opened the first school of rhetoric in Athens and was a contemporary of Socrates and Plato. Isocrates' influence on ancient Greek culture was considerable given the number of important students who emerged from his curriculum, among them Nicocles and Aristotle (Kennedy, 1999, pp. 25, 38). Isocrates influenced other Greek academies, and ". . . his school became the model for the Roman world and ultimately Christendom" (Bizzell & Herzberg, 2001, p. 26; Kennedy, 1999, p. 39). Isocrates' rivals (Plato in particular) attempted to peg him as an amoral sophist. However, Isocrates' permanent location in Athens (unlike the nomadic sophists) and his dedication to teaching rhetoric for the common good separated him from sophists like Protagoras and his former teacher, Gorgias (Kennedy, 1999, p. 39).

Another aspect of Isocrates' philosophy that separates him from the early sophists is his approach to ethics, which directly supports many service-learning goals. Isocrates believed that morals could not necessarily be taught (unlike Aristotle), but that "the study of speech and politics can help to encourage

and develop moral consciousness” (Kennedy, 1999, p. 39). In the Loeb edition of *Antidosis*, we read where Isocrates (1929) outlines his ideas regarding morals and rhetoric:

But I do hold that people can become better and worthier if they conceive to speak well, if they become possessed of the desire to be able to persuade their hearers, and, finally, if they set their hearts on seizing their advantage. (Section 2, p. 337)

And later, he writes that “the stronger the man’s desire to persuade his hearers, the more zealously will he strive to be honourable and to have the esteem of his fellow-citizens” (Isocrates, 1929, Section 2, p. 339). Isocrates emerged from the tradition of the early sophists, but his lifelong commitment to Athens and his students, and his rhetorical approach to education and civic activism, made him a unique figure in Greek philosophy and a valuable thinker for contemporary writing teachers. Isocrates’ approach to epistemology is key to his integration into technical communication pedagogy.

Epistemology, Taxonomy, and Performance in Isocrates

As noted above, scholars have highlighted two major limitations to traditional approaches of service-learning: a lack of theoretical connections between community engagement and ethics. To respond to Herzberg’s (Schutz & Gere, 1998) concerns about helping students understand the deeper connections between rhetoric, writing, and issues of social justice, I argue that instructors should include Isocrates in their pedagogy. As outlined above, Isocrates offers a unique approach to discourse and practice that aligns with a number of contemporary theorists and that provides a generative foundation for teaching. He makes contributions to these areas in at least three ways: epistemology, taxonomy, and performance. In the following sections, I interweave my discussion of these three ideas with my experiences using service-learning with engineers in a technical communication course.

Epistemology. Epistemology, as used here, refers to the methods by which Isocrates builds knowledge. Epistemology is important for civic engagement and technical writing pedagogy because contemporary scholars have called for more democratic approaches to knowledge building between college and community partners where community partners are treated as equals (Cushman, 1996; Simmons & Grabill, 2007; Sullivan & Porter, 1997). Reconsidering how writing teachers, students, and their community partners build knowledge also answers the call from theorists for a more discursive approach to civic engagement (Asen, 2004). If technical communication is to move toward a more discursive approach to engagement—writing *with* the community as Deans (2010) states—it is helpful to understand the epistemological model used to enact

discourse and conduct research. Important to this discussion are two primary methods the ancient Greeks used to build knowledge: *physis* and *nomos* (Getto et al., 2011; Kennedy, 1999, p. 30). For comparison's sake, and because Plato and Aristotle are so commonly used in college contexts, I discuss epistemology as envisioned by these two philosophers, as well as Isocrates' approach.

Kennedy (1999) explains that classical philosophers who follow a *physis* approach to building knowledge base their method in a fixed truth. They ascertained fixed truth either through the natural world (Aristotle's causal universe outlined in his *Metaphysics*) or through transcendental philosophy (Plato's dialectic outlined in his *Gorgias*) (Kennedy, 1999, p. 30). Specifically, both Plato and Aristotle believe in an objective "truth," but their methods of attaining this truth differ. Plato uses the Socratic method where a philosopher guides a student on a transcendental search for discovery (Kennedy, 1999, p. 58). On the other hand, Aristotle believes that we can attain truth in his causal universe through argument among individuals using rhetoric "to see the available means of persuasion" (Kennedy, 1999, pp. 76–78). So, even though Plato and Aristotle take different paths to discover or build knowledge, both philosophers adhere to *physis* because both believe that truth is fixed.

Nomos, Kennedy (1999) explains, is a more "relativistic" approach to building knowledge that works with an evolving reality rather than a fixed reality based on the natural world or attained through transcendental or metaphysical methods (p. 30). *Nomos* treats discourse as situated and *kairotic* (doing the right thing at the right time) and that *nomos* asks the rhetor to consider contextual information, such as culture and audience, to develop communication (Kennedy, 1999, pp. 30, 39).

Unlike his Athenian contemporaries, Isocrates uses an approach to building knowledge that is closer to *nomos*. While generally not considered a traditional sophist, Isocrates still operates in a space between *nomos* and *physis*, between the early sophists and later philosophers like Plato and Aristotle (Bizzell & Herzberg, 2001, p. 67). Isocrates' approach to rhetoric focuses on performative civic discourse, and like early sophists, "Fitness for the occasion—*kairos*—is all" (Bizzell & Herzberg, 2001, p. 69). Isocrates' *kairos* makes him a useful model for situations like civic engagement that require situated rhetoric. To help illustrate these theoretical concepts, I borrow from Spinuzzi's (2003) and Simmons and Grabill's (2007) work in theory mapping. These maps are also effective in teaching these ideas in technical communication courses, as I discuss below. Figure 1 plots these different methods of epistemology on continuums between *physis* and *nomos*, transcendental and causal knowledge building.

Isocrates' location in the *nomos* plane, as Haskin's (2004) notes, can be attributed to his "performative vision" and his "performative understanding of *mimesis* that emphasizes the continuity between *paideia* of the poetic tradition and civic training" (pp. 6–7). That is, Isocrates' epistemology is located in a flexible and "ever-evolving social performance, rife with ambivalent ethical

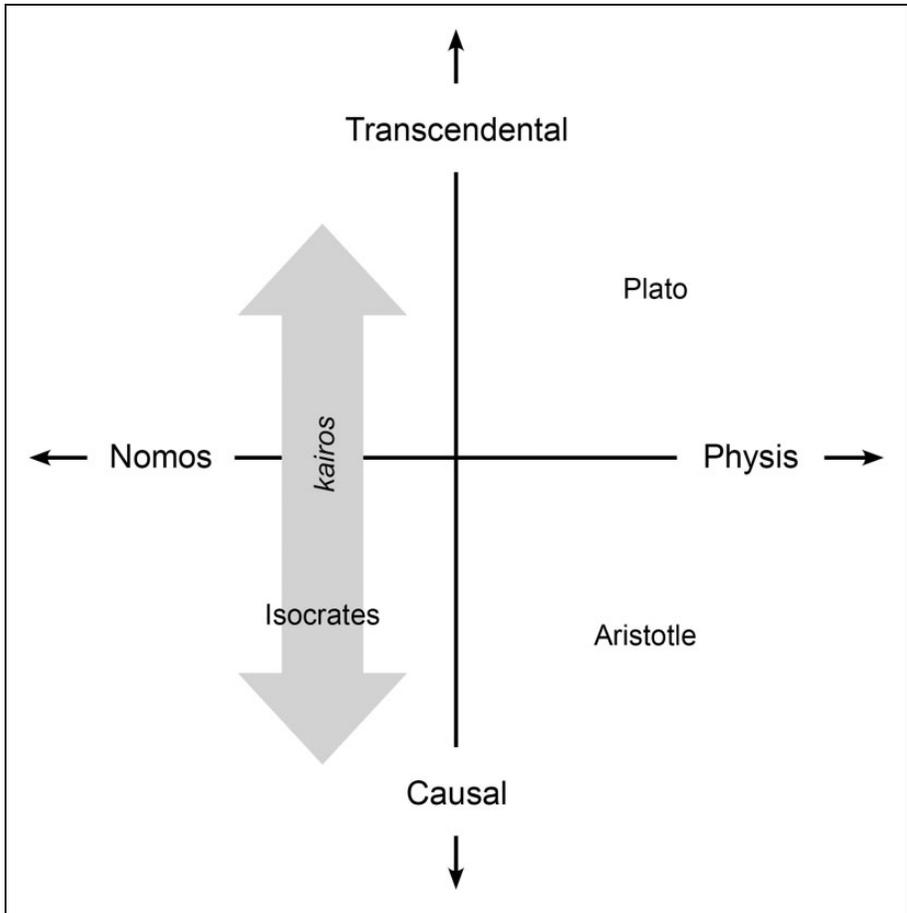


Figure 1. Map of epistemologies.

and political tendencies” (Haskins, 2004, p. 5). On the contrary, Plato and Aristotle’s epistemologies though emerging from two different sources (causal and transcendental) are fixed in a stable truth.

From Isocrates’ work, we can look to *Against the Sophists* for evidence of his *nomos-kairotic* epistemology. In *Against the Sophists*, he discusses both the generative power of speech and its need to be flexible. Here, Isocrates chides instructors who teach inflexible forms (genres) when they should be showing students how they can use “invention [epistemology], arrangement, and style” to respond to the rhetorical situation (Kennedy, 1999, p. 42):

But I marvel when I observe these men setting themselves up as instructors of youth who cannot see that they are applying the analogy of an art with hard and fast rules

to a creative process. For, excepting these teachers, who does not know that the art of using letters remains fixed and unchanged, so that we continually and invariably use the same letters for the same purposes, while exactly the reverse is true of the art of discourse? For what has been said by one speaker is not equally useful for the speaker who comes after him . . . mechanical formulas are not sufficient. There must be inventiveness, resourcefulness, in a word, creative imagination. (Isocrates, 1980, p. 12)

The creative imagination made possible by a *kairotic* model allows students to adjust to the various genres and situations required in civic engagement.

Isocrates' epistemology and the XO-1 project. A primary goal in my civic engagement projects is to foster collaborative knowledge building while also producing quality deliverables that meet stakeholders' needs and expectations. One of the most challenging issues I face, however, is bringing together stakeholders who often come from different backgrounds to achieve this collaborative knowledge building. This challenge is especially acute when students come from privileged upbringings or fields, such as engineering and business, that may approach collaboration in hierarchical ways. Asking students to think critically about cultural hierarchies can be very difficult (Dubinsky, 2002; Scott, 2004). Changing how instructors refer to collaborators is effective; specifically, using the client-to-partner model is helpful (Dubinsky, 2002). But more theoretical methods are often needed, especially when the goals of the civic engagement experience include a deeper understanding of social justice and digital mediation (Getto et al., 2011; Schutz & Gere, 1998). These concerns are why I use Isocrates to teach civic engagement in technical communication.

The semester that included the XO-1 project began like many other terms: Students, mostly engineers and business majors, were hesitant about the technical communication course because their programs had required it. Students were equally dubious about participating in a service-learning project: They did not know how service-learning differed from client projects. Nevertheless, we began the semester by reviewing rhetorical principles, such as purpose, context, and medium, with special attention paid to audience so students could think differently about client-partner identity. We also covered Aristotle's ethos, pathos, logos, and logical fallacies. In addition, we read Isocrates, Aristotle, and some Plato. Moreover, we studied user-centered design (UCD) as envisioned by Johnson (1998) and Anderson (2007) and applied this approach to students' first major assignment, job search documents.

As was the norm, my students more easily grasped the basic rhetorical principles than they did the complex theories like epistemology and UCD. The more adept students recognized the contradiction between Aristotle's (1991) definition of rhetoric "... observing in any given case the available means of persuasion" and UCD (Book 1, Part 2). They asked questions like, "Are we persuading?"

Or are we cooperating and collaborating? Persuasion seems different from collaborating.” This confusion speaks directly to why I began integrating Isocrates into my pedagogy. Isocrates’ approach to rhetoric, a more philosophical and discursive model, helped students understand the contradiction between Aristotle’s definition of rhetoric and UCD. Reading about Isocrates’ *kairotic* approach helped the students more effectively tailor their job search documents to match their readers’ needs rather than constructing arguments built on tenuous positions like “I am the best candidate for this position.” Beginning the term with Isocrates and UCD also helped us transition to the civic engagement project. For the community project, students collaborated with teachers of local, at-risk elementary students to compose a feasibility study on the XO-1 laptop produced by the OLPC Foundation.

The OLPC Foundation developed the XO-1 laptop to assist children in socioeconomically challenged communities worldwide improve skills in literacy, math, and technology. The XO-1 is an affordable, lightweight, and durable notebook that helps children learn with one another and connect to the Internet. Rather than linking to the Internet directly, XO-1 laptops use Mesh Networking to interface with one another and form a chain of links. The entire mesh of XO-1 laptops connects to the Internet through one machine located near the base station; this connection occurs automatically so little administration is needed. The XO-1’s operating system, Sugar, is Linux-based, and OLPC claims it is child-friendly. As part of the Give One Get One campaign in 2008, the Purdue Writing Lab purchased an XO-1 to make sure that its Online Writing Lab (OWL) worked on the OLPC notebook. As the OWL Coordinator at the time, I recognized this situation as an opportunity to integrate the XO-1 into my technical writing course.

One of the goals of the project was to have my students collaborate with local teachers to see whether the XO-1 might help at-risk elementary age students in greater Lafayette, IN, improve skills in reading, writing, and math. Fostering this type of reciprocal knowledge building, however, proved difficult even though the technical writing students who expressed interest in the project were enthusiastic about working with such an interesting piece of technology. Following the job search document assignment, I introduced the XO-1 to the class, and three electrical and computer engineering students jumped at the opportunity to use it. When I met with the student group to discuss the project, however, the idea of collaborative knowledge building seemed confusing. To address these challenges, I developed early versions of the theory maps included in this article; during student conferences, I quickly sketched them on sheets of paper.

Also, to better explain the connections between collaborative epistemology, authors, and audiences, we read Miller’s (1979) “A Humanistic Rationale for Technical Writing.” In her article, Miller argues against positivism in technical communication, writing that “the conviction that sensory data are the only

permissible basis for knowledge; consequently, the only meaningful statements are those which can be empirically verified” (p. 17). I have found that Isocrates’ discursive (*nomos-kairotic*) epistemology answers Miller’s call for a postpositivist technical communication theory and pedagogy. As such, I also assigned excerpts from Isocrates’ *Against the Sophists*, *Antidosis*, and Aristotle, as well as Dubinsky (2002), Cushman (1996), and Sullivan and Porter (1997). These pieces helped students better understand the importance of epistemology and the limitations of the positivist (*physis*) approach.

After beginning the XO-1 project, the student group, who named themselves the “Read Barons”¹ as a play on reading and the “Red Baron,” conducted research on the laptop and the challenges facing local, at-risk schools. As I continued to meet with the Read Barons, we discussed the differences between client and service-learning projects, as well as the connections between the rhetorical theory we were reading and how they should be working with their community partners. On the basis of conference conversations, I found that Miller’s piece and the early version of the epistemologies map in Figure 1 helped students understand the difference between “writing *about* the community” and “writing *with* the community” (Deans, 2010). While the Read Barons were conducting research on the XO-1, they were also investigating the notebook’s end users.

Some of the information my students discovered about local at-risk elementary-age students included demographic data. The local school systems in greater Lafayette served a mixture of socioeconomically challenged children and the children of immigrants, mostly Spanish speaking. Caucasian students served by the local school system mostly came from families whose parents worked in manufacturing and corn processing. Some parents, however, held service jobs in retail or jobs at Purdue University. Some parents from Spanish-speaking families worked in agriculture or in service jobs within the Spanish-speaking community. The Read Barons also discovered that these demographics shifted, as they conducted their research away from town. At-risk children who lived outside of Lafayette came from families who worked in agricultural jobs, such as farming and livestock. Many of the local teachers had graduated from Purdue’s education program and settled in the area. With this demographic information, my students proceeded with their research, firmly believing that the XO-1 would be useful given its graphic operating system, which does not depend on advance skills in technology or English.

The Read Barons’ first step after investigating OLPC, the XO-1, and local schools was to develop systematic methods of assessing the usability of the laptop—a first step in epistemology and a step closer to developing knowledge in a nonhierarchical ways. To help the Read Barons better understand the importance of hierarchical knowledge building, we next had to discuss information taxonomy, a concept that was still confusing to them. The tech savvy engineers did not understand that our community partners’ knowledge was just as important as the knowledge that they were developing. We were facing the town-gown

disconnect at an epistemological level. Isocrates' nonhierarchical approach to taxonomy helped the Read Barons understand the importance of working with community partners as coexperts.

Taxonomy. Taxonomy, as used here, refers to the categories into which Isocrates places his philosophical concepts. Interrogating how writing teachers, students, and their community partners organize knowledge is important to the type of engagement discussed here because scholars have advocated combining areas of knowledge—theory, research, and practice—in order to foster participatory approaches to *praxis* (Simmons & Grabill, 2007; Sullivan & Porter, 1997). Scholars like Boyer (1990) have asserted that combining theory, research, and practice allows instructors to more easily integrate pedagogy into their scholarship, thus creating the “scholarship of engagement.” Similar to the Epistemology section above, I examine the theories of commonly used rhetoricians as I make my way to Isocrates' taxonomy. This process mirrors the steps we took in class as we read excerpts from the philosophers discussed in this article.

In most of his work, Plato views civic rhetoric as dubious, and he considers his philosophical education better suited for personal enlightenment rather than training for a life in the *polis*. As Leff (2004) writes, Plato focuses on theoretical notions of philosophy and “totally dismisses practical knowledge and thus can imagine no intrinsic values attached to rhetoric . . . [he] disassociat[es] rhetoric from virtue” (p. 249). Therefore, Plato's role in a discussion of rhetoric and civic engagement does not apply to this context. These points are discussed at length elsewhere (Haskins, 2004; Leff, 2004), though I do include Plato in the theory–practice map in Figure 4 for reference.

In his work on rhetoric and persuasion in social and political contexts, Aristotle searched for his fixed truth through methodical processes. Part of Aristotle's approach to determining truth was establishing a complex system of taxonomies (Bizzell & Herzberg, 2001, p. 30). However, Aristotle's system separated theory (epistemology) and practice (performance), which contrasts with both Plato and Isocrates, but plays a very important role in the writing disciplines' approaches to service-learning and engagement. Garver (2004) explains Aristotle's theory–practice split in this way:

Aristotle differs from both Plato and Isocrates by his sharp distinction between theory and practice. That distinction has consequences for his conception of *technê*, and the relation between art and civic practice . . . civic education and philosophy have nothing to do with each other. (pp. 196–199)

While Aristotle separates knowledge into categories, he also elevates some categories over others—this is important to consider given the town-gown hierarchies that jeopardize collaborative college–community relationships.

Garver (2004) argues that for Aristotle “practice is subordinate to theory . . .” (p. 199). This point is important because, as noted above, many instructors use Aristotle as their primary source of theory in civic engagement. Garver (2004) writes, “In a strict sense, there is no such thing as civic education for Aristotle, not if education is thought to be anything other than moral education” (pp. 203–204). Although Aristotle separates theory from practice, and even elevates theory over practice, these two concepts come close to overlapping in Aristotle’s idea of *praxis* (Depew, 2004). Despite theory and practice nudging against each other in his concepts of *praxis*, Aristotle treats *theōria* as superior to *praxis* in his *Nicomachean Ethics*, an important point when discussing the theoretical models for college–community partnerships (Depew, 2004, p. 158). Understanding Aristotle’s theory–practice split requires an overview of his concept of *phronesis*.

Aristotle integrated a good deal of Isocrates’ ideas into his own philosophy (Depew, 2004). Although Aristotle adapts Isocrates’ idea of *phronesis*, or practical reason, Aristotle categorizes and approaches *phronesis* in a markedly different manner in *Nicomachean Ethics* (Depew, 2004, pp. 158–169). Depew (2004) states, “Aristotle goes on to deny . . . that *phronesis* should be called *Sophia* [wisdom] . . . which is precisely what Isocrates does call it . . .” (p. 170). Aristotle’s concept of *phronesis*, therefore, contrasts with Isocrates’ ideas of practical wisdom. Depew argues that Isocrates, in *Antidosis*, connects to *sophia* (wisdom) and *doxa* (opinion), whereas Aristotle splits the two: “Aristotle also explicitly denies that *phronesis* is reducible to opinion . . . or to guesswork or conjecture (*euboulia*) . . .” (p. 170). Figure 2 illustrates Aristotle’s taxonomies,

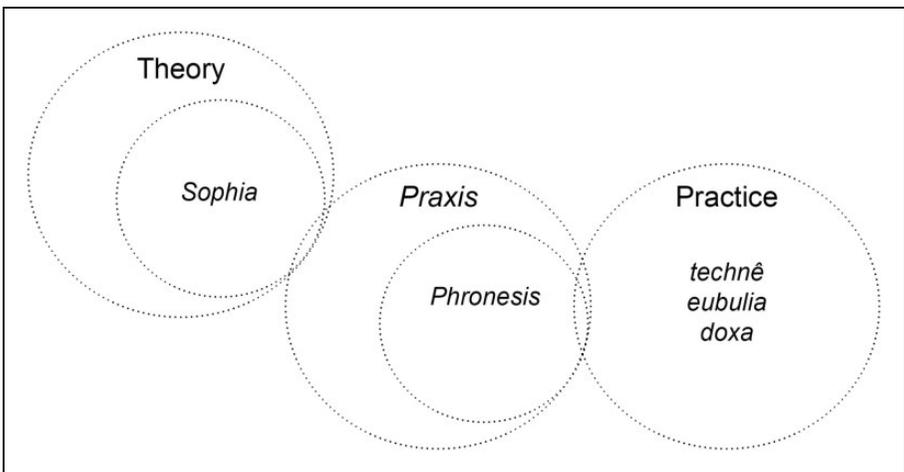


Figure 2. Diagram of Aristotle’s taxonomy.

where theory is superior to *praxis* and practice, and it includes *sophia* (wisdom). Theory and practice press up against each other in *praxis*, which contains Aristotle's concept of *phronesis*, but excludes *doxa* (opinion) and *euboulia* (guesswork or conjecture). Aristotle subverts his idea of *techné* (craft wisdom) to practice, as shown in Figure 2.

The placement of Aristotle's concepts of *phronesis* in his taxonomy is important to his role in rhetorically based engagement methodologies. For instance, Haskins (2004) explains: "As a neutral capacity, Aristotle's rhetoric cannot stand on its own as a discourse, it must be animated by *phronesis*, which is autonomous from and superior to *techné*" (p. 121). Aristotle's hierarchical concept of knowledge becomes critical when we consider the implications for this type of knowledge building in college–community projects. For instance, if instructors advocate a reciprocal approach to epistemology among community–teacher–student, then elevating theory (ostensibly what happens on campus) over practice (ostensibly what happens in the community) contributes to the ivory tower model most universities are trying to resist.

For Isocrates, however, the continuum between theory and practice is negligible; he believes that knowledge develops from practice. Therefore, his concepts of theory and practice, unlike those of Plato and Aristotle, are interdependent. Garver (2004) points out that for Isocrates, the overlapping theory–practice taxonomy should form a framework for all actions: "Plato and Isocrates define philosophy in very different ways, but each contrasts philosophy with sophistic rhetoric, not only as ways of using and conceiving language, but as ways of life" (p. 194). Garver goes on to say that for Isocrates "Civic education . . . depends on the *unity* [emphasis added] of theory and practice. Aristotle, by contrast, thinks that the distinction between theory and practice preserves the legitimacy and autonomy of each" (pp. 194–195). Ultimately, Isocrates combines theory and practice, as Garver notes: "in the *Antidosis* Isocrates denies the separation of theory and practice in order to advance his own idea of philosophy" (pp. 284–285).

Moreover, Isocrates connects theory and practice with rhetoric and virtue by arguing that rhetors must engage in practice to develop knowledge and that in order to practice good rhetoric, people must be virtuous. Leff (2004) states, "In the case of Isocrates . . . the need to reconcile the instrumental and intrinsic values of rhetoric leads to a circular identification of deliberation with rhetorical expression and of rhetorical excellence with political virtue" (p. 249). Depew (2004) builds on Leff's idea when he argues, "Those who have practical or technical knowledge are not, for Aristotle, wise. For Isocrates, by contrast, *only* such persons are wise" (p. 162). By combining theory and practice, rhetoric, and virtue, Isocrates establishes a unique position for his ideas of *phronesis*.

An overview of Isocrates' concepts of *phronesis* is necessary for an inquiry into the methodologies of college–community engagement because, as Haskins (2004), Garver (2004), and Leff (2004) have noted, Isocrates views *phronesis* as

both generative and widely available to participants in civic discourse. Moreover, while Aristotle separates *phronesis* from theory and practice (Haskins, 2004, p. 121) and subjugates *phronesis* to scientific knowledge (*epistēmē*), Isocrates combines theory and practice and includes *phronesis* in the continuum between theory and practice (p. 114). Isocrates identifies *phronesis* as discursive action that incorporates conjecture (*doxa*) (Poulakos, 2004, pp. 52–57), guesswork (*euboulia*), wisdom (*sophia*), and cleverness (*deinotēs*) (Depew, 2004, p. 170). Lastly, because Isocrates' *phronesis* combines theory with practice, his concepts of practical wisdom are more democratic and action-oriented than Aristotle's *phronesis* (Haskins, 2004, p. 116). Figure 3 illustrates how Isocrates' ideas of theory–practice and *phronesis* overlap.

In Figure 3, *praxis* is elevated because Isocrates believed that the only way to build knowledge—practical and theoretical—was to enact ideas. *Phronesis* here is represented as the overlapping space where theory, practice, and *praxis* interact. Rather than excluding *sophia*, *doxa*, and *euboulia* from theory, Isocrates

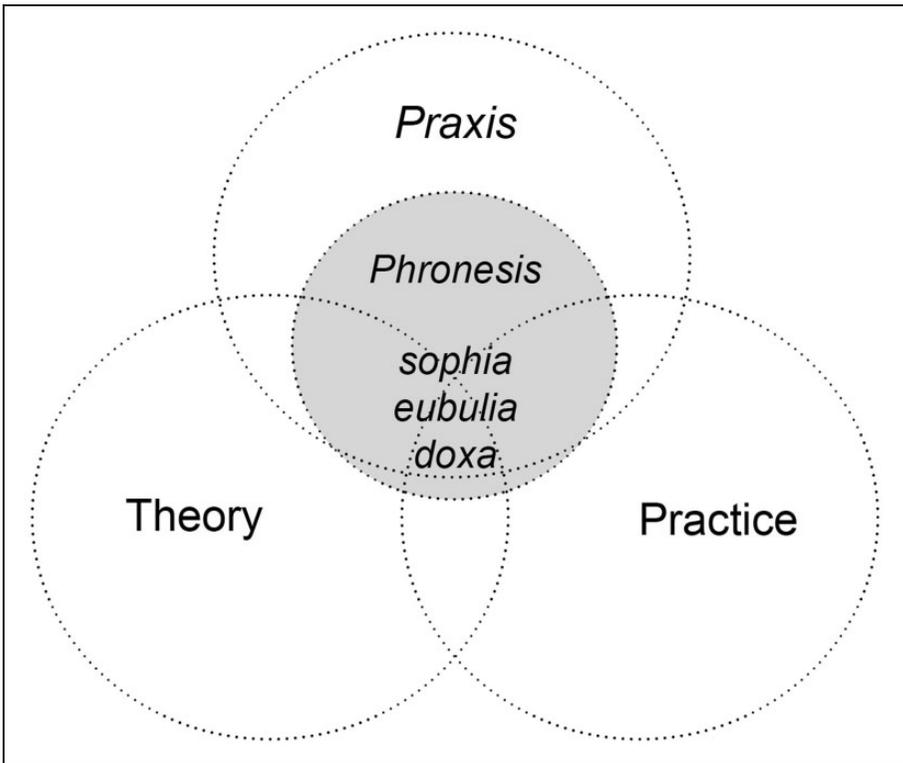


Figure 3. Isocrates' taxonomy.

includes them as important parts of *phronesis*. Figure 4 illustrates the philosophers' taxonomies plotted on these planes: pure theory—civic discourse; theory and practice—theory versus practice.

Aristotle is located in two planes because he maintains categories for both theory and practice; therefore, one could follow Aristotelian methods to work entirely in theory or practice. Though as mentioned above, Aristotle subjugates practice to theory. Isocrates is located in the space between theory and practice, civic discourse, and pure theory because of his overlapping and interdependent taxonomies. As noted above, Depew (2004), Garver (2004), Leff (2004), and Haskins (2004) all argue that Isocrates *connects* theory and practice, as well as

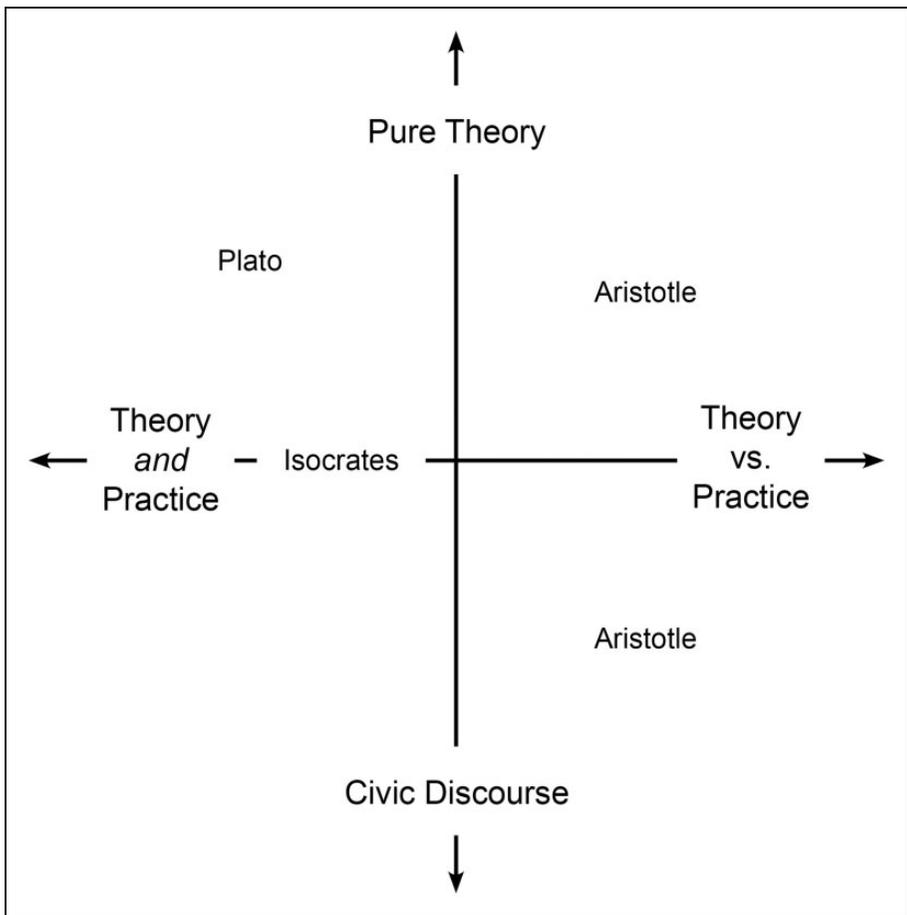


Figure 4. Completed map of taxonomies.

theory and civic discourse in *Antidosis*. In *Antidosis*, we read one example of this move when Isocrates (1929) explains his ideas of wisdom and philosophy:

They characterize men who ignore our practical needs and delight in the mental juggling of the ancient sophists as “students of philosophy,” but refuse this name to those who pursue and practice those studies which will enable us to govern wisely both our own households and the commonwealth—which should be the objects of our toil, of our study, and of our every act. (p. 343)

Using theory and practice together in this way is important for writing scholars involved with civic engagement, as they attempt to connect these concepts through service-learning. Mixing theory and practice creates a *kairotic* rhetoric suitable for civic engagement that fosters nonhierarchical taxonomies.

Isocrates’ taxonomy and the XO-1 project. As noted in the Epistemology section above, one of the primary challenges facing this civic engagement project was helping students resist hierarchical methods of developing information. Students understood that they were supposed to work with the elementary teachers and their students to determine the feasibility of using the XO-1 in local at-risk schools. But the specific manner by which this was to happen, usability testing, was still confusing to them. They were also confused about the connection between rhetorical theory and usability testing.

Moreover, our situation was further complicated by the testing site being inaccessible. This project was not a formal research study but rather a service-learning experience. Therefore, the elementary school teachers had agreed to use and test the XO-1 in their classes to provide feedback, but the Read Barons were not able to work with community partners in person—an obstacle we did not find out about until after the term has started. The process of obtaining the required background checks for my students to access school property would have made the project timeline impossible. Rather than canceling the project, we developed feedback methods that would help my students to not only collaborate as closely possible with their community partners but also work in a remote testing context.

The Read Barons’ first step was to develop basic tasks participants could complete without a lot of instruction or supervision, replicating the process the elementary teachers would have to follow with their students. To help them develop these tasks, the Read Barons read the usability chapter from Anderson (2007), and I provided them with methods from the Purdue University OWL usability project I was helping to run. On the basis of these readings, the Read Barons developed basic feedback mechanisms participants could complete and return. The team decided on a brief questionnaire, some of which is included below.

To pilot the questions for the XO-1, the Read Barons first tested the laptop with fellow students. The student team realized, of course, that the participant pool for the pilot test was much different from their end users, the teachers and students at the local elementary schools. The Read Barons’ goals in conducting the pilot test were to see if participants could open and use the XO-1’s basic applications following the laptop’s online instructions and to assess the outcomes of these tasks. In this way, the Read Barons took another step away from an author-centered epistemology and began moving toward collaborative knowledge building. Along with questions about technology access, the Read Barons asked their peer participants to rate their computer skill and to evaluate the XO-1 in qualitative terms. They also asked participants to “rate on a scale of 1–10 (with 1 being lowest and 10 being highest) your impression of the XO-1 with regards to the following: Overall score, web browsing, opening a PDF, writing a document” (T. Hastings, personal communication, December 6, 2008). The Read Barons decided on this basic questionnaire because of their limited participant pool ($N=20$), and because they wanted to keep testing as simple as possible. They knew that their teacher participants would be operating the XO-1 in a classroom by themselves without data collectors. To code and analyze the qualitative data, the Read Barons used a simplified version of Grounded Theory (Strauss, 1987). To code and analyze quantitative data, the students used descriptive statistics.

The Read Barons reported their initial findings in their second major assignment, and the research outcomes were mixed. Secondary research found that some users in economically challenging situations across the globe liked OLPC and the XO-1. My students discovered that, for the most part, the OLPC distributed the laptop effectively and maintained efficient training, though this was not always the case. The Read Barons also found that most children liked the XO-1 and that teachers felt the laptop helped students learn reading, writing, and technology, though these results were sometimes mixed. Many times, political instability in host countries affected the outcomes of OLPC efforts. The Read Barons also found that their peer reviewers’ responses were not overwhelmingly positive.

The peer pilot testing yielded mostly poor results for the XO-1. Some participants liked the XO-1 but most did not like the laptop’s operating system, as the Read Barons noted in their first report: “Users found Sugar to be confusing and frustrating, often not showing them exactly what they needed to do to accomplish a task” (T. Hastings, personal communication, December 6, 2008). Table 1 shows the results of the peer pilot usability test ratings, where 1 is a low rating and 10 is a high rating.

Table 1. XO-1 Pilot Test Usability Ratings.

	Web browsing	Opening PDF	Writing document	Overall experience
Average	6	2	7	3

On the basis of their initial research, the Read Barons recognized that they would have to obtain more usability feedback. This feedback would have to be obtained from end users, the teachers and students, before a final decision could be made about integrating the XO-1 into at-risk schools. However, even at this point, the Read Barons were cautiously optimistic about the laptop and were fairly certain that the teachers and students would want the XO-1. They maintained this view despite the laptop's bugs and its shortcomings, such as the inability to access some wireless networks. Their optimism is illustrated in the opening paragraph of the Discussion section of their report: "With the implementation of the XO Laptop in elementary schools, the hope is it will break the monotony of normal curriculum, excite children to learn new things, and aid teachers with introducing new subjects" (B. Ellison, personal communication, December 6, 2008).

Importantly, though, the Read Barons take a guarded position in their conclusion:

After conducting the research and reading the reviews, and extensive use of the laptop, it became clear that a closer look and more research needs to be done before a decision is made . . . due to its active development, and the promise of the upcoming XO-2, a wait and see approach is recommended at this time. (B. Ellison, personal communication, December 6, 2008)

At this point in the project, the Read Barons were connecting the rhetorical theory we had been reading for class and their work with the XO-1. On the basis of their initial findings, they better understood the possible limitations of technology and why it is important to work collaboratively with end users when testing technology. After the XO-1 pilot testing, we began working on ethics in technical communication. For this section, we read excerpts from *Antidosis* that discuss agency and performance.

Performance. Performance, as used here, refers to the methods by which Isocrates enacts the knowledge he builds (epistemology) and organizes (taxonomy). Reconsidering how performance impacts epistemology, as well as the theory–practice split, is important for civic engagement because scholars have argued for more action-oriented, collaborative approaches to community-based projects. It also allows instructors to discuss ethics and agency as they relate to knowledge building and writing. For this section, I again juxtapose Plato and Aristotle with Isocrates to help explain my points.

Plato criticizes the idea of performance when he discusses it, while Aristotle acknowledges its importance in the *polis*—though he does not consider it connected to epistemology. On the other hand, Isocrates considers performance a vital part of his epistemology, as well as a part of his approach to rhetoric and education. Plato's and Aristotle's approaches to performance differ from Isocrates' notions of performance partly because they use a *physis* approach

for knowledge building; they also form more rigid taxonomies than does Isocrates. Plato sees rhetoric and performance as potentially misleading, and so, unethical (Leff, 2004, p. 249). While Aristotle recognizes the importance of performance in deliberative, epideictic, and forensic rhetoric, he degrades it and places performance in a separate category from skill in rhetoric and wisdom. Leff (2004) writes that

Aristotle...reduces the performative force of rhetoric to 'an empty husk'...Isocrates, on the other hand, not only places it [performance] at the center of his educational program, but he also presents that program in texts that are designed to embody it. (p. 252)

Isocrates, however, builds knowledge discursively, through performance, while resisting the strict taxonomic split between theory and practice. Because of this approach, Haskins (2004) argues that Isocrates may provide a more effective theoretical model for situations of civic discourse in contemporary contexts (p. 134). She also argues that for Isocrates, performance is vital to rhetoric, education, and civic discourse; she maintains that Isocrates builds knowledge through *nomos*, a more situated concept of truth(s): “[Isocrates] encapsulates a vision of rhetoric as ever-evolving social performance, rife with ambivalent ethical and political tendencies” (Haskins, 2004, p. 5). In addition, Haskins suggests that Isocrates inexorably ties performance to discourse, agency, and virtue, which answers the call from contemporary technical writing scholars for ways to connect service-learning and engagement with responsible citizenship (p. 30). Lastly, Haskins connects Isocrates’ concepts of performance, civic education, and politics, which is important in discussions of research and practice in college–community partnerships and engagement: “Isocrates thereby promotes a performative view of the rhetorical training as a *mimêsis* of civic excellence” (p. 31). Figure 5 illustrates the three rhetoricians’ concepts of performance. The rhetoricians are plotted on a continuum of ethical and unethical views of performance, and they are plotted on a continuum of agency to illustrate the extent to which they believe performance influences agency.

Isocrates is located in the agency/ethical plane because he views performance as identity forming and a virtuous way to pursue Greek ideas of civic excellence (Haskins, 2004, p. 31). Plato occupies the farthest point from Isocrates’ idea of performance because Plato believes rhetoric, and especially performance, do not help people discover truth (an exception is Plato’s “true rhetoric” in *Phaedrus*). Aristotle occupies a position in the tool of delivery plane because he separates rhetoric from that which builds identity.

For Isocrates, therefore, performance is part of knowledge building, part of enacting philosophy, and part of fulfilling his and his students’ commitment to bringing about change in the *polis*. In *Antidosis*, we read one example of these

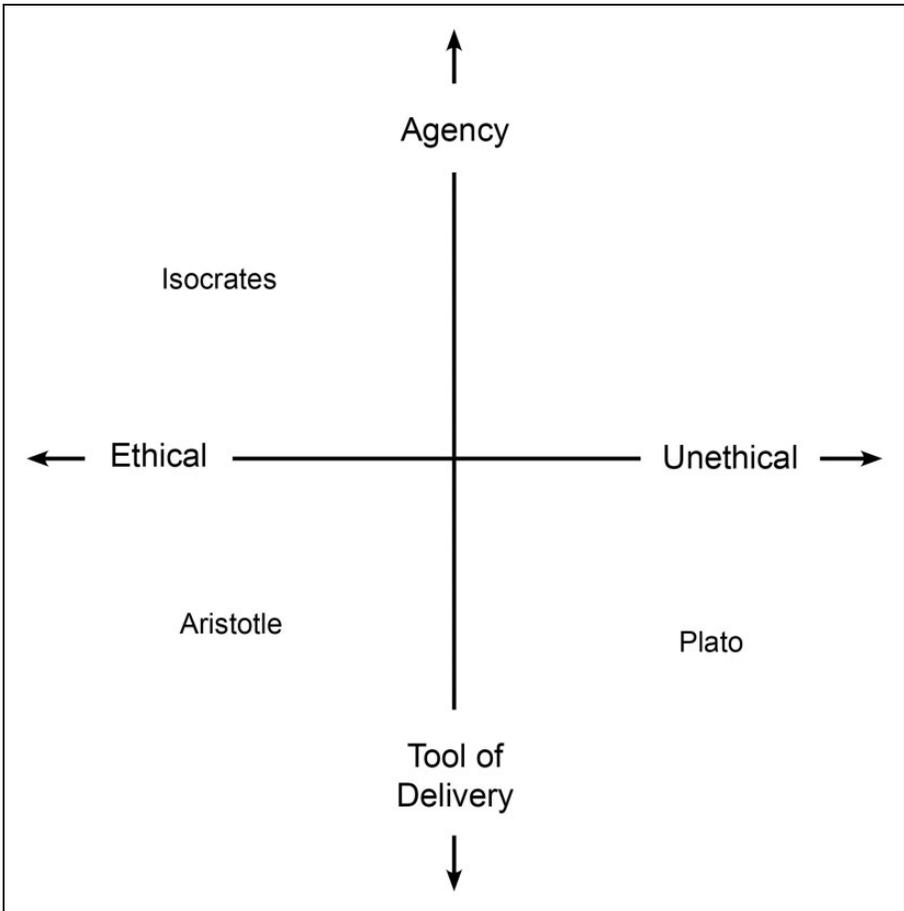


Figure 5. Map of performance.

concepts when Isocrates connects the study of philosophy/rhetoric as preparation for civic work and students' worth as citizens:

You will conceive that the cultivation of the mind is the noblest and worthiest of pursuits and you will urge our young men who have sufficient means and who are able to take the time for it to embrace an education and a training of this sort. And when they are willing to work hard and to prepare themselves to be of service to the city, you will make much of them. (Isocrates, 1929, p. 355)

Isocrates' discussion here is especially important for students working through rhetorical theory, writing, and issues of virtue as a model for helping them mature as active members of a democracy.

Isocrates' performance and the XO-1 project. The final stage of the XO-1 service learning project called for the Read Barons to revise their questionnaire and use it with their community partners—in philosophical terms, they had to enact their ideas through performance. Once the teachers ($N=5$) had used and tested the laptop with their students, they completed the experience questionnaire and returned it to the Read Barons for coding and analyzing. Admittedly, this method was less than optimal; in the best testing situation, the Read Barons would have been on site recording time-on-task data, navigation paths, and responses of participants as they used the XO-1. However, as this was not possible, my students used the best method of data collection available to them, the feedback form, where they collected qualitative and quantitative data. Once they collected their data, the Read Barons wrote their feasibility study as their capstone project. To revise the questionnaire administered to the teachers, the Read Barons used the data from their pilot testing (and their third assignment, the SEED Document; see Bernhardt & McCulley, 2000). The experience feedback questionnaire is included in Appendix A.

The Read Barons found that the teachers and their students liked the XO-1 at first and thought it was fun. But eventually, the teachers saw limited use for the laptop in their schools:

The results of the interviews were rather mixed. The teachers... felt that due to their young student body they would have trouble incorporating it into their lesson plans. The children that used the laptop were entertained by it for about forty-five minutes, but soon after lost interest... the teachers also felt that the laptop's operating system lacked the direction that an intuitive piece of software would give. (L. Conway, personal communication, December 6, 2008)

Though the results emerged directly from teacher feedback, these findings were difficult for my students to accept. The mixed results of the teacher questionnaires reflected a complex reality, but the Read Barons adjusted their initial impression of the situation and responded in an informed, ethical, and *kairotic* manner. Given the data from the end users, my students had to rethink their initial conclusions and recommend a different course of action, wait for the next generation of XO:

The features available for the XO-2 far surpass those of the XO-1 Laptop... the XO-2 employs two touch-screen lcd displays instead of the normal screen and keyboard. This will encourage other programs to be used like two player games each using one of the touch-screens. The new laptop could even aid in the replacement of traditional textbooks by using digital copies because the two screens give a user the illusion of reading from an actual book both by look and feel. (L. Conway, personal communication, December 6, 2008)

After the success of touch screen technology like the iPad, it is easy to see the prescience of this advice.

Discussion

Technical communication instructors who use classical rhetoric should reconsider the epistemological differences between Plato, Aristotle, and Isocrates when working in civic engagement because knowledge building influences the construction and perception of reality, as Miller argued (Miller, 1979). Integrating Isocrates in technical communication pedagogy is helpful for building college–community partnerships because when writing instructors use a methodology (positivism) that assumes the existence of an objective truth (*physis*), a space for discursive knowledge building with community partners may be less likely. Instead, what may develop is a method of interaction based on hierarchical taxonomies that exacerbate rather than diminish the gaps between college and community—the flawed expert model outlined by O’Meara and Rice (2005). Flower (2008) has also noted the importance of considering more discursive rhetorics:

As the rhetoric of engagement moves us out of closed academic conversations...we discover that familiar academic models of critique, advocacy, and adversarial argument are not the only or even the best guides to social change.
(p. 4)

If instructors working in civic engagement use a more discursive knowledge building process, they may be in a better position to build knowledge collaboratively with their community partners, as Flower (2008) stresses when she states

Once one steps beyond academic analysis and critique, perhaps the most significant aspiration and dilemma is how to relate to others—especially to marginalized or culturally diverse “Others”—across chasms of difference. For educators, the problem is not merely theoretical; it means figuring out how to construct a rhetorical space that can support transformative relationships. (p. 3)

While instructors might begin their efforts with rhetoricians, such as Aristotle, their ability to spark transformative relationships might be augmented by Isocrates’ discursive and *kairotic* epistemology.

Also, taxonomic differences between Plato, Aristotle, and Isocrates are important to reconsider because basing work in theories that contradict civic efforts may jeopardize both the college–community partnerships and pedagogical efforts to educate students. For instance, Plato did not believe philosophy should be used to educate people to interact in the *polis*, and he separates theory from civic rhetoric, considering the pursuit of truth as the highest form

philosophy. Even so, many university programs are steeped in Plato's philosophy. Aristotle's separation of theory and practice also seems to contradict some of the primary ideas of civic engagement, and it may leave technical communication instructors less space to integrate philosophy with action. Even though Aristotle allows for some overlap in his concept of *praxis*, Aristotle's taxonomy still elevates theory above practice, which privileges academic pursuits above the efforts of those committed to community work. This type of taxonomic split may jeopardize ongoing, successful college–community relationships where college *and* community members should be recognized as experts.

Lastly, differing ideas of performance between Plato, Aristotle, and Isocrates should be reconsidered because agency is an important part of civic engagement. Isocrates' concept of performance might influence students' concepts of agency as they complete their work with community partners. If university programs and instructors are attempting to instill transformative values and develop lifelong habits of social justice, connecting performance and agency seems especially valuable. This process may be difficult, however, considering the institutional inflexibility regarding the philosophers (Plato, Aristotle) that are held up as models. Isocratean ideas of performance, rhetoric, and civic discourse, while not specifically teaching virtue, allow students and faculty to connect agency to service-learning so that instructors might engage college students on existential and ethical levels. Specifically, Isocrates sees performance as an integral part of his epistemology, his overlapping taxonomies, and a key part of a rhetor's agency. This approach allows teachers of writing to discuss students' continued commitment to civic engagement. These points are also useful for instructors utilizing the "structured reflection" model where students discuss what they have accomplished, why their experiences have been meaningful, and how they plan to apply what they learned in the future. Toward the end of her book, Haskins (2004) speaks to these points when she argues

Isocrates integrates discursive training with civic education, which he regards as a lifelong pursuit not reducible to a set of procedures and commonplaces . . . Isocrates' vision of constitutive rhetoric of political identity can be understood as a reformist . . . attempt to bring together democracy and virtue. (p. 130)

This is not to say that Isocrates' approach is better than other approaches in every situation. My argument here is merely that instructors be aware of the theoretical models they are using and consider integrating Isocrates into their pedagogy when appropriate. To help convey the interactive and generative nature of Isocrates' theories, Figure 6 brings together the philosophical ideas I outlined in the previous section and illustrates how they address the issues I discussed earlier in this article.

To help outline how we applied the theories illustrated in Figure 6, I also provide the 16-week semester plan in Appendix B.

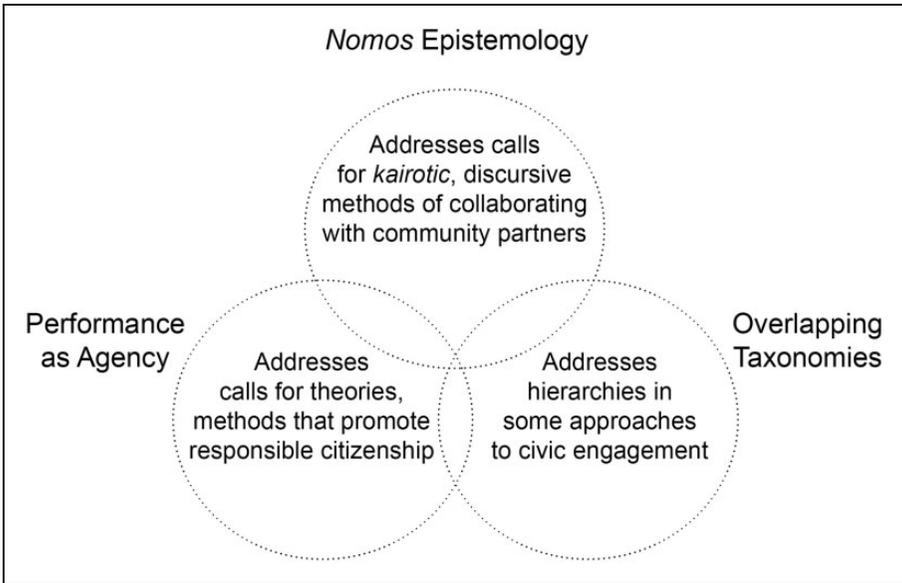


Figure 6. Isocrates' overlapping epistemology, taxonomy, and performance as they relate to challenges in traditional approaches to civic engagement.

In the final chapter of *Logos and Power in Isocrates and Aristotle*, Haskins (2004) argues that Isocrates can help contemporary teachers prepare their students for a “performance-centered culture” through his “discursive training with civic education” (p. 130). Moreover, she calls on pedagogues to integrate Isocrates into courses to help students push past the strictly *techné* concept of rhetoric postulated by Aristotle (Haskins, 2004, p. 132). She states

The Isocratean pedagogy requires us to go beyond the mechanics of discourse composition and analysis. While building upon the existing repertoire of analytical skills, it invites teachers and students to probe the ways in which verbal and visual symbolism shapes what we consider reasonable and desirable. (Haskins, 2004, p. 134)

These goals seem especially important, as writing scholars call for increased awareness of the theoretical and ethical frameworks in civic engagement. Moreover, as writing scholars call for models that will help students write *with* community partners rather than merely *about* community partners, Isocrates' discursive, *kairotic* approach to epistemology seems especially applicable. The Read Barons' experience with the XO-1 is a good example of this *kairotic* approach.

Conclusion

As a model for integrating discursive epistemology into technical communication and civic engagement, this article answered Haskins' call for writing instructors to apply Isocrates, and it discussed methods for mixing philosophy, education, and practice. In turn, it argued that Isocrates can augment inquiry-driven engagement projects involving technology and usability, like the XO-1 project, to help students better understand the ethical and philosophical frameworks of complex civic issues. By the end of the XO-1 project, the Read Barons understood the cost in labor, finances, and outcomes of attempting to use the laptop to address literacy issues of at-risk students. Had they not worked with the scholars outlined in this article and integrated informal usability testing into their project, I fear that they might have made an all-too-common mistake: throwing technology at a misunderstood problem and hoping for the best. Technology researcher Evgeny Morozov (2013) has called this approach "solutionism" and recently explained its dangerous shortcomings. By integrating Isocrates into pedagogy, instructors can move students away from counterproductive perceptions of rhetoric, technology, and civic engagement and position them closer to a collaborative model of working with stakeholders and working with our *polis*.

Looking ahead, it would be helpful to begin assessing students' impressions and project outcomes by using systematic measures designed for civic engagement. These measures could include case studies; but they could also include survey models, such as the Civic Attitudes and Skills Questionnaire, the Community Service Involvement Preference Inventory, the Service-Learning Performance Checklist, and the Texas Social Behavior Inventory-Short Form. As noted above, numerous scholars have called for more empirical methods in civic engagement to work in tandem with an increase in theoretical models, such as the one I discussed here. Using these survey methods to measure a project that integrates Isocrates, usability testing, and technology would answer scholars' calls and assess the outcomes of mixing theory and practice. Such a study would be a valuable addition to the corpus on civic engagement, and it would help instructors design effective models for using rhetorical theory to teach technical communication.

Appendix A

Teacher Experience Questionnaire

1. Do you have at least one computer and Internet access in your classroom?
2. How often do you use a computer for teaching in your classroom?
3. What types of computer programs do you use for teaching?
4. Would a laptop for each student help your teaching curriculum? Why or why not?
5. What subjects would you implement the computers?

6. Have you heard of the XO Laptop?
7. If yes, do you think it would be a good laptop to distribute to teachers and students in greater Lafayette? Why or why not?
8. Would it change your opinion of XO distribution if the XO ran Microsoft Windows?
9. Now that you've used the XO a little, what do you think about it? What did you like/dislike? And what would you change?
10. How might the XO be used to improve English literacy and technology literacy for children of low-income families?

Appendix B

Semester Plan

Unit 1—Rhetoric and Technical Communication

Week 1: Definitions and Concepts of Rhetoric

- Aristotle (excerpts from *On Rhetoric*, 1991)
 - Ethos, pathos, logos (induction, deduction, syllogisms, enthymemes), the fallacies, *techné*
- Plato (excerpts from *The Republic*, *Phaedrus*, *Allegory of the cave*, 1997)
 - Philosophy and rhetoric: good versus bad rhetoric
- Isocrates (excerpts from *Against the Sophists*, 1980; *Antidosis*, 1929)
 - Rhetoric and philosophy: epistemology, taxonomy, performance—using the theory maps, we returned to these concepts throughout the semester

Week 2: The Reader- and User-Centered Approaches

- Communication and your career, reader-, user-centered versus author-centered
- Johnson (excerpts from *User-centered technology*, 1998)

Week 3: Audience Analysis, Cover Letters and Résumés for the Job Document Assignment

- Tailoring job documents

Week 4: Rhetoric, Technical Communication, and Civic Engagement

- Miller (A humanistic rationale for technical writing, 1979) and epistemology
- Ethics: St. Augustine (excerpts from *On Christian Doctrine*, 1958), Katz (The ethic of expediency, 2004)

Week 5: Rhetoric, Technical Communication, and Civic Engagement, Continued

- Dubinsky (Service learning as a path to virtue, 2002), Cushman (The rhetorician as an agent of social change, 1996)

Unit 2 – Research Methods, Stasis Theory, and Visual Literacy

Week 6: Inquiry-Bases Research, Research Questions (the *stases*)

- Exploratory methods for the white paper assignment (qualitative and quantitative)

Week 7: Visual Literacy, Document, Web Design and Taxonomy

- Gestalt theory, color theory, the F and Z reading patterns
- Organizing online information and information architecture

Week 8: Editing and Proofing

- The Paramedic Method
- The Five Principles of Readability

Unit 3 – The SEED Document, Creating and Delivering Presentations, Usability and Readability

Week 9: The SEED Document Assignment (Abduction) and Thinking Critically About Research and Findings

- Bernhardt and McCulley (Knowledge management and pharmaceutical development teams, 2000)

Week 10: Professional Presentations

- PowerPoint slides
- Oral delivery

Week 11: The SEED Document Workshops

- Peer review and instructor conferences

Unit 4 – IMRaD, Problem-Solution Reports, Feasibility Studies, and Empirical Research

Week 12: Report Organization and Research as Epistemology

- Sullivan and Porter (excerpts from *Opening Spaces*, 1997), interviews, observations, surveys, and usability
- Coding and analyzing data (descriptive statistics and Grounded Theory)

Week 13: Team In-Class Work

Week 14: Team In-Class Work

Week 15: Team In-Class Work and Instructor Conferences

Week 16: Team Presentations

Rather than taking a prescriptive approach, my purpose in providing this outline is to offer a loose framework that instructors may apply to their own models. Furthermore, while I used Anderson's (2007) text, this semester plan can work with any number of technical communication books.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Research for this article was supported by grants from Purdue University and Loyola University Maryland.

Note

1. I obtained permission to use all student work. Student names are omitted to protect anonymity and pseudonyms are used in all "personal communication" quotations.

References

- Anderson, P. (2007). *Technical communication: A reader-centered approach* (6th ed.). Wadsworth, CT: Wadsworth.
- Aristotle (1991). *On rhetoric* (G. Kennedy, Trans.). New York, NY: Oxford University Press.
- Asen, R. (2004). A discourse theory of citizenship. *Quarterly Journal of Speech*, 90(2), 189–211.
- Bernhardt, S., & McCulley, G. A. (2000). Knowledge management and pharmaceutical development teams: Using writing to guide science. *Technical Communication*, 43, 22–34.
- Bizzell, P., & Herzberg, B. (2001). *The rhetorical tradition: Readings from classical times to the present*. Boston, MA: Bedford/St. Martin's.

- Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate*. San Francisco, CA: Jossey-Bass, The Carnegie Foundation for the Advancement of Teaching.
- Brizee, A. (2014). Toward participatory civic engagement: Findings and implications of a three-year community-based research study. *Computers and Composition: An International Journal*, 32, 22–40.
- Cushman, E. (1996). The rhetorician as an agent of social change. *College Composition and Communication*, 47(1), 7–28.
- Deans, T. (2010). English studies and public service. In T. Deans, B. Roswell & A. Wurr (Eds), *Writing and community engagement: A critical sourcebook* (pp. 97–116). Boston, MA: Bedford/St. Martin's.
- Depew, D. (2004). The inscription of Isocrates into Aristotle's practical philosophy. In T. Poulakos & D. Depew (Eds), *Isocrates and civic education* (pp. 157–185). Austin, TX: University of Texas Press.
- Dubinsky, J. M. (2002). Service-learning as a path to virtue: The ideal oratory in professional communication. *Michigan Journal of Community Service Learning*, 8, 61–74.
- Dunne, J. (1997). *Back to the rough ground: Practical judgment and the lure of technique*. Notre Dame, IN: University of Notre Dame Press.
- Eyler, J., Giles, D. E. Jr., & Schmiede, A. (1996). *A practitioner's guide to reflection in service learning: Student voices and reflections*. Nashville, TN: Vanderbilt University.
- Flower, L. (2008). *Community literacy and the rhetoric of public engagement*. Carbondale, IL: Southern Illinois University Press.
- Garver, E. (2004). Philosophy, rhetoric, and civic education in Aristotle. In T. Poulakos & D. Depew (Eds), *Isocrates and civic education* (pp. 186–213). Austin, TX: University Of Texas Press.
- Getto, G., Cushman, E., & Ghosh, S. (2011). Community mediation: Writing in communities and enabling connections through new media. *Computers and Composition: An International Journal*, 28, 160–174.
- Grabill, J. T. (2007). *Writing community change: Designing technologies for citizen action*. Cresskill, NJ: Hampton Press.
- Haskins, E. V. (2004). *Logos and power in Isocrates and Aristotle*. Columbia, SC: University of South Carolina Press.
- Herzberg, B. (1994). Community service and critical teaching. *College Composition and Communication*, 45(3), 307–319.
- Isocrates (1929). *Antidosis* (Vol. 2, G. Norlin, Trans.). New York, NY: G. P. Putnam's Sons.
- Isocrates (1980). *Isocrates with an English translation in three volumes (Against the Sophists)* (G. Norlin, Trans.). Cambridge, MA: Harvard University Press.
- Jacoby, B., & Associates (2003). *Building partnerships of service-learning*. San Francisco, CA: Jossey-Bass.
- Johnson, R. (1959). Isocrates' methods of teaching. *The American Journal of Philology*, 80(1), 25–36.
- Johnson, R. (1998). *User-centered technology: A rhetorical theory for computers and other mundane artifacts*. Albany, NY: State University of New York Press.

- Johnson-Sheehan, R. (2006). *Lectures thirteen and fourteen: De Oratore* (Lecture Notes: English 622, Classical Rhetoric). West Lafayette, IN: Department of English, Purdue University.
- Kahn, S., & Lee, J. (2001). *Activism and rhetoric: Theories and contexts for political engagement*. New York, NY: Routledge.
- Kennedy, G. A. (1999). *Classical rhetoric and its Christian and secular tradition* (2nd ed.). Chapel Hill, NC: University of North Carolina Press.
- Leff, M. (2004). Isocrates, tradition, and the rhetorical version of civic education. In T. Poulakos & D. Depew (Eds), *Isocrates and civic education* (pp. 235–265). Austin, TX: University of Texas Press.
- Miller, C. (1979). A humanistic rationale for technical writing. *College English*, 40(6), 610–617.
- Morozov, E. (2013). *To save everything, click here: The folly of technological solutionism*. New York, NY: Public Affairs.
- O'Meara, K. A., & Rice, R. E. (2005). *Faculty priorities reconsidered: Rewarding multiple forms of scholarship*. San Francisco, CA: Jossey-Bass.
- Poulakos, T. (2004). Isocrates' civic education and the question of Doxa. In T. Poulakos & D. Depew (Eds), *Isocrates and civic education* (pp. 44–65). Austin, TX: University of Texas Press.
- Poulakos, T., & Depew, D. (2004). Introduction. In T. Poulakos & D. Depew (Eds), *Isocrates and civic education*. Austin, TX: University of Texas Press.
- Schutz, A., & Gere, A. R. (1998). Service learning and English studies: Rethinking 'public' service. *College English*, 60(2), 129–149.
- Scott, B. J. (2004). Cultural studies and service learning. *Technical Communication Quarterly*, 13(3), 287–306.
- Simmons, M. W., & Grabill, J. T. (2007). Toward a civic rhetoric for technologically and scientifically complex places: Invention, performance, and participation. *College Composition and Communication*, 58(3), 419–448.
- Spinuzzi, C. (2003). *Tracing genres through organizations: A sociocultural approach to information design (Acting with technology)*. Cambridge, MA: MIT Press.
- Strauss, L. A. (1987). *Qualitative analysis for social scientists*. New York, NY: Cambridge University Press.
- Sullivan, P. A., & Porter, J. E. (1997). *Opening spaces: Writing technologies and critical research practices*. Greenwich, CT: Ablex Publishing Corporation.

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Other Articles on Communication by This Author

- Bergmann, L., Brizee, A., & Wells, J. (2012). The engaged dissertation: Three points of view. In A. Gilvin, G. M. Roberts & C. Martin (Eds), *Collaborative futures: Critical reflections on publicly active graduate education*. Syracuse, NY: Graduate School Press, Syracuse University.
- Brizee, A. (2008). Stasis theory as a strategy for workplace teaming and decision making. *Journal of Technical Writing and Communication*, 38(4), 363–385.
- Brizee, A. (2014). Cross-disciplinary collaboration: Fostering professional communication skills in a graduate accounting certificate program. *Across the Disciplines: A Journal of Language, Learning, and Academic Writing*, 11(1) Retrieved from http://wac.colostate.edu/atd/articles/brizee_langmead2014.cfm
- Brizee, A. (2014). Toward participatory civic engagement: Findings and implications of a three-year community-based research study. *Computers and Composition: An International Journal*, 32, 22–40.
- Brizee, A., Sousa, M., & Driscoll, D. L. (2012). Writing centers and students with disabilities: The user-centered approach, participatory design, and empirical research as collaborative methodologies. *Computers and Composition: An International Journal*, 29(4), 341–366.
- Salvo, M., Ren, J., Conard-Salvo, T., & Brizee, A. (2009). Usability research in the writing lab: Sustaining discourse and pedagogy. *Computers and Composition: An International Journal*, 26(2), 107–121.