Imagining a Writing and Rhetoric Program Based on Principles of Knowledge "Transfer": Dartmouth's Institute for Writing and Rhetoric

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Abstract: While "transfer" has become, in recent years, a subject of great research interest to our field, we still have much to learn about how we can best use this research knowledge to inform local efforts in program development. In this profile, we describe the foundations of the Dartmouth Institute for Writing and Rhetoric and explain how transfer research might inform our future directions in writing and speech. We conclude by explaining what we have learned already from our literature review, our study of first-year student writing, our curricular pilots, and our efforts at ongoing exchange.

Introduction

Dartmouth's Institute for Writing and Rhetoric (IWR) is a program in dynamic flux, with a long, strong history and an evolving vision for the future. We are collectively thinking about transforming our program design to intentionally foster writing knowledge transfer, operationalizing the available research about transfer while remaining open to the evolution of this research over time. This program profile is a collaborative attempt to identify the reasons for such a move and the shapes it might take, in hopes that other programs will find our process and thinking useful. The profile overviews our program, its current underpinnings, and the transfer research that might ground our program's future shape. We offer a sketch of an ideal program that might foster opportunities for students to transfer writing and speech knowledge across their studies and beyond. Finally, we discuss what we have learned so far about our students and our program design, the curricular and faculty development initiatives with which we are experimenting, and what remains to be considered.

We use the word "transfer" in this profile with full acknowledgement of its contested and complex nature as a term. Learning does not occur "in" an individual who moves it from context to context, but in the ongoing relationships between the individual and the activity systems she occupies and shapes. Writing knowledge and know-how do not simply move from one context to another; they adapt, transform, orient, are re-imagined and newly applied; they change the context in the process and are changed by the process. "Transfer," developed also in other contributions to this special issue of *Composition Forum*, is the label we use to index this broader dynamic. We understand it as the very heart of learning—how it occurs and how it is sustained. For this reason, Dartmouth's Institute for Writing and Rhetoric is beginning to re-imagine a writing program that puts facilitating the possibility of transfer at its core.

Our histories, then and now

Formally established in 2008, the IWR stands as the largest academic enterprise on Dartmouth's campus, offering 125 courses in writing and speech per year. While the Institute offers a healthy slate

of speech courses and a growing list of upper-level writing courses (see Appendix 1 for course descriptions [dartmouth-course-descriptions.pdf]), the bulk of the Institute's course offerings are first-year writing courses, including Writing 5 and the writing-driven, discipline-inspired first-year seminar, which together comprise the two-term writing sequence required by the college. Underprepared writers are invited to enroll in Writing 2-3 in lieu of Writing 5, but before taking their first-year seminars (see Appendix 2 for sample syllabi [dartmouth-sample-syllabi.pdf]). Speech 20: Public Speaking is the core speech course—an optional course open to students from all disciplines and years of study. Optional upper-level speech courses (e.g., Intercultural Communication, Persuasive Public Speaking, Speechwriting, Rhetoric of Social Justice, Legal Rhetoric, Resistance to Influence) expand ways of thinking, theorizing, and doing speech. Upper-level writing courses currently include Writing with Media, Writing in the Workplace, Arguments in Context, Writing and Speaking Public Policy, The Art of Science Writing, and Composition Theory and Practice. Among Ivy League institutions, Dartmouth is unusual in requiring a sequence of first-year writing courses; our peer institutions typically require only one composition course (although they generally operate on semesters as opposed to Dartmouth's ten-week quarter system) or do not have a writing requirement at all.

The sequencing of our courses provides the IWR with the opportunity to examine two challenges: the challenge of understanding how students transfer their knowledge and know-how about writing and speaking from one course to another, and the challenge of determining how to create a coherent curriculum in which the possibility of transfer is fostered. It is interesting to note that although faculty have articulated them differently over time, these questions regarding transfer—why writing education hasn't seemed to "stick" after Freshman English and what to do about it—have persisted at Dartmouth for more than a century. Even a cursory look at archival documents will reveal that Dartmouth faculty, like their counterparts in institutions of higher education nation-wide, were engaged in a decades-long preoccupation with whether writing, on the one hand, is a skill to be mastered *prior to learning*—and then easily transferred to other occasions for writing—or whether writing is an integral *part of learning itself*—in which case transfer becomes situational, more slippery to grasp and to apply. And now, we are beginning to ask similar questions about speaking and other modes of communication.

While early twentieth-century attempts at curriculum design fell firmly in the former camp, these questions found interesting articulation in the 1960s when two significant events occurred on the Dartmouth campus, both sponsored by the Carnegie Foundation. The first was Albert Kitzhaber's 1962 Report of the *Dartmouth Study of Student Writing*; the second was the 1966 Dartmouth Seminar, an Anglo-American conference organized around the question "What is English?"—a conference that many acknowledge as cementing the establishment of the field of Rhetoric and Composition as we know it today.

Kitzhaber's work at Dartmouth was driven by two questions: First, can composition at Dartmouth be taught more effectively? Second—and perhaps more pertinent to our discussion—is there a way to ensure that students will continue to write well after their first-year writing courses? Or, put in current terms, how might we design our courses to encourage transfer? In order to answer these questions, Kitzhaber counted errors in papers submitted across Dartmouth's previous two-course sequence, English 1 and English 2. He found that certain kinds of error occurred more frequently as students moved forward in their writing education—for instance, errors in focus and structure occurred more frequently at the end than at the beginning of English 1, and errors in punctuation and mechanics increased rather than decreased in frequency by the end of English 2 (Kitzhaber 58-59). Interestingly, while these findings of increased frequency of error suggested that writing is not a skill which, once learned, will inevitably be transferred (a finding which many studies would later confirm), Kitzhaber's advice for addressing the issue of failed transfer was most unsatisfying. Be strict in your

grading, he instructed professors—and not only writing professors, but professors of subsequent classes (*The Writing of Dartmouth Students after the Freshman Year* 195).{1} [#note1] Kitzhaber assumed that the presence of high and uniform standards would encourage (though not by themselves accomplish) the transfer of knowledge.

At the 1966 Dartmouth Seminar, Kitzhaber, though no longer a Dartmouth faculty member, was invited to deliver the conference's keynote speech, "What is English?" While the dynamics of the conference are too complicated to summarize tidily, it is perhaps fair to say that the Americans, represented by Kitzhaber, advocated in favor of defining English as a discipline that included language, literature, and composition. The cohort from the United Kingdom, represented by James Britton, countered that "the key question was not: 'What is the subject matter of English?'—but rather: 'What do we want students and teachers to be doing?' His answer was to define English as that space in the curriculum where students are encouraged to use language in more complex and expressive ways" (Harris 634). Britton's emphasis on *what students are doing* might be understood as promoting the second notion of writing and transfer mentioned above—i.e., that writing is part of learning itself, and that the transfer of knowledge and know-how from task to task is slippery, complex, and situational.

Although the stage at Dartmouth was set to explore how transfer works (or does not work) in the situated construction of knowledge, a lack of coherence in the administrative structure of the writing programs impeded our progress. In 1966, a few months before the Dartmouth Seminar, Dartmouth had adopted the aforementioned expository writing/first-year seminar writing sequence, adding a two-term option for underprepared students in the early 1980s. While individual course sections offered students effective and even excellent teaching, a different administrator directed each of the three writing programs (English 5, the two-term English 2-3, and the First-year Seminar), and each of these administrators operated in isolation from the others. One faculty member described the administrative structure as "hydra-headed." Growth without communication created a structure that operated robustly in its parts, but was not set up to function effectively as a whole.

It wasn't until 2004 that, subsequent to an external review, the three programs—now Writing 5, Writing 2-3, and the First-year Seminar—were brought under a single administrative entity in the freestanding Dartmouth Writing Program. When Speech was added in 2008 after existing as a one-person "Office of Speech," suspended some years prior, the Writing Program became the current Institute for Writing and Rhetoric.{2} [#note2] The aforementioned upper-level courses were added to the Institute's course offerings, along with Speech 20 and a number of upper-level rhetoric courses.

Overall, the establishment of the Institute as an autonomous entity proved to be an important moment in the evolution of Dartmouth's writing culture, in that the Institute provided an administrative structure upon which a cohesive writing and speech program might be built. While the Institute operates independently of other departments and programs and has its own core faculty who staff the first part of the two-term writing sequence, along with colleagues from the English department, the Institute also draws from faculty across the disciplines to staff the first-year seminars. The Institute's establishment as an autonomous entity, its strategic sequence of writing courses, its interdisciplinary composition—all affect the way we think about, theorize, and do writing and speech instruction, and all affect, in ways positive or not, our opportunities to facilitate writing transfer. This profile explores these issues.

Our theories, once and future

Initial foundations

Over time, the Institute for Writing and Rhetoric developed an understanding of our official theoretical underpinnings that became loosely assembled in the phrase "active learning"—a term that we defined (somewhat contrary to common use) as a student-centered pedagogy that engages students deeply and collaboratively in the various processes that comprise composition. In our writing and speech classrooms, active learning pedagogy manifested itself in a variety of ways, including collaborative learning (in the tradition of Kenneth Bruffee's "Conversation of Mankind" and further enlightened by the work of John Trimbur, Lisa Ede and Andrea Lunsford, and Rebecca Moore Howard); peer-to-peer instruction (as informed foundationally by Peter Elbow and Ann Ruggles Gere, and developed later through the work of Eric Mazur and many others); and learning via technology— which includes writing with wikis, or reading and writing multimodal composition (nourished by the various work of the members of The New London Group and validated by Kathleen Blake Yancey's keynote speech at the 2004 CCCCs).

Speech courses are similarly grounded in the IWR's particular "take" on active learning methodology. In Speech 20: Public Speaking, students enact a collaborative, active model of public speaking. A Speech 20 syllabus notes that students "test public speaking against a criteria of good dialogue" and "explore speechmaking processes, products, and connections between processes and products. Speech classes also feature applications of rhetorical, social scientific, and critical theories. As the current draft of a shared Speech learning outcome puts it: "Students will understand, and, when applicable, apply and extend, communication theory, concepts, or models, critically engaging theory into practice in societal contexts." Speech courses, like writing courses, reflect active processes of discovery and learning that should go well beyond the classroom walls of an individual class.

It is important to note here that this collection of methods has been more broadly inspired by scholarship on issues of power as they play out in the classroom. Specifically, the Institute has encouraged faculty to enact Paulo Freire's notion of the "teacher-learner" by designing student-driven learning environments that shift to students some portion of the authority that has traditionally been theirs. Students, in turn, have been expected to take increased responsibility for their writing educations by becoming "learner-teachers"—which typically requires students to lead discussions or engage in peer-to-peer instruction, and may go so far as to ask them to design their own writing or speaking assignments, or to collaborate with the instructor to determine course aims and assess course work. Best practices in active learning and results in the transfer scholarship clearly overlap: for example, responsibility for one's learning can increase the motivation that fosters transfer; student-designed assignments can foster the metacognition that facilitates transfer and offers students the opportunity to actively formulate transferable principles; and peer-to-peer instruction, well designed, might afford transfer across assignments or courses.

As we understand the term, active learning is also grounded in constructivist understandings of students' development. In the field of writing studies, we see these understandings in both the write-to-learn strand and the broader social constructivist strand. As George Newell suggests, "knowledge develops within particular instructional contexts when students are *actively engaged"* (our emphasis), and knowledge only "takes" when it becomes "knowledge in action," a step that writing and speaking can enable (236). Vygotskian models of zones of proximal development are particularly important theoretical frames that support our attention to the peer collaboration and dynamic classroom interactions we consider essential to active learning, although Lev Vygotsky's work has infrequently been an explicit topic of broad-based discussion for us. Our stated commitment to these various

methods is proving invaluable to our program as we begin to navigate our way through the complicated terrain of knowledge transfer.

The brief overview of relevant transfer scholarship that follows hints at what might be, even as we recognize that the field and the IWR still have much to do in order to operationalize the research knowledge. The two sections following this overview offer a description of our current institutional structures and practices and their relationship to facilitating—or hampering—transfer, and then provide a sketch of an "ideal" program that could operationalize the research in ways that are compatible with our goals.

Evolving directions

As we have already suggested, active learning principles sometimes intersect with the research to which the IWR is considering turning: research on fostering knowledge transfer. Active learning approaches in general have been justified, in terms of neuroscience and cognitive psychology, by the work of John Bransford and colleagues, whose research also figures centrally in transfer discussions. His team emphasizes the role of activity and engagement in student learning, as well as the importance of scaffolding, practice, analogy-driven learning, engagement with preconceptions, attention to the combination of factual knowledge, conceptual knowledge, knowledge organization, and development of metacognitive approaches. Writing studies have further developed many of these concepts that the transfer research has been developing in other fields for decades.

Several longitudinal studies of student writing in the past couple of decades have offered warnings to the field of composition about the challenges of transfer. Even as these studies were not necessarily focused on "transfer" by name, they have given sharp insight into successes, failures, and unintended consequences in the program structures and student experiences they have analyzed. The smaller-scale case studies (see, for example, Beaufort; Herrington and Curtis; Haas; McCarthy; Chiseri-Strater) identify individual students' experiences of disconnect between first-year writing or general education and their majors, between university writing and writing in their subsequent professional lives or graduate studies, and across disciplines in college. The larger scale studies (including Sommers and Saltz; Lunsford and Lunsford; Haswell; Carroll; Sternglass) report important nuances of students' development: a direct relationship between deepening expertise in their majors and writing competence; disconnects between in-school and out-of-school writing experiences; "regression" in writing when students are faced with tasks of increased complexity; and direct, unintended consequences in students' development because particular teaching approaches led students to back away, in new contexts, from strategies that posed problems for them in the past rather than mastering the strategies.

The rich evidence of longitudinal studies also indirectly supports what we have learned from studying the research on transfer, namely, that transfer depends heavily, although not exclusively, on our teaching: when we teach with analogies, encourage metacognition, scaffold student learning, motivate our students effectively, and provide sufficient time for the learning to "take," our teaching potentially enables transfer (Gray and Orasanu; Bransford et al; Dias et al; Haskell). Additional key elements from the broader discussions of transfer that matter to us here include understanding that vertical transfer and scaffolding (first explored by Vygotsky) are essential to effective transfer; understanding the crucial role of affordances; distinguishing among "near" and "far" transfer, as well as "forward" and "backward" transfer, and how each contributes to learning; studying the possibility that some automated learning is quite useful to overall writing development; understanding the relationship between "spontaneous" transfer and deep expertise as well as the types of expertise in question (Postman; Simon and Hayes; Perfetto, Bransford and Franks); exploring the emerging notion of

"threshold" concepts in different disciplines; and recognizing the role of antecedent genres in both facilitating and hampering transfer (Bawarshi and Reiff; Reiff and Bawarshi).

When we help students to see a connection between classroom knowledge and the "real world," we are also better supporting their ability to transfer knowledge. In terms of the "real world" to which learning should be tied, we know that today's students will enter a world of unprecedented complexity that requires them to communicate with multiple audiences in multiple modes. Research suggests that students cannot transfer knowledge that is only associated with one mode or context (Eich; Bjork and Richardson-Klavhen). Based on this understanding, we have a working hypothesis that multimodal assignments can foster transfer in both of the ways mentioned above: these assignments connect to the "real world" that students will enter by requiring them to reuse abilities—such as the ability to make an argument and support it with evidence—in a new context.

Studies are also beginning to suggest that the competencies required to be digitally literate are in some ways similar to the competencies required by traditional literacies—in other words, students become digitally literate by drawing on familiar cognitive abilities and transferring these abilities to a new medium's particular set of features (Bruce; Coiro et al; Lunsford and Lunsford; Kress). To do *this* kind of transfer more intentionally, our students need to acquire the rhetorical flexibility—adaptability to context and need—that allows them to use digital media precisely as we have always helped them to use writing: to solve problems, to explore ideas, and to communicate both with themselves and with a variety of audiences around the globe.

Perhaps most important of all, we are learning in studies of transfer that how something transfers is not the same depending on what—what kind of knowledge or know-how—is being transferred (Donahue). This distinction leads naturally to the question: What kinds of knowledge are writing and speaking?—a rarely considered topic that will be central to our ongoing inquiry here at Dartmouth. In addressing this question, we have found research on the nature of expertise in relation to writing in the disciplines to be particularly helpful. While not always considered to be directly a part of the general "transfer" literature, this work offers additional ways to model a curriculum that fosters transfer opportunities.

In particular, the research on situated cognition and the model of "communities of practice" can inform a program design that seeks to intentionally foster knowledge transformation, helping us to re-imagine the nature of students' experiences moving into and out of multiple college communities. Specifically, Jean Lave and Etienne Wenger offer a model of writing development in which we do not conceptualize college as "an" academic community but rather as a "set of relations among persons, activity, and world, over time and in relation with other tangential and overlapping communities of practice" (135). Paul Prior suggests that this approach allows us to understand disciplines as slippery, open networks of human activity rather than unified social territories with stable epistemological and rhetorical moves (xi). This understanding changes our approach to students' status as novices as they move beyond the first year: "disciplinary enculturation thus refers not to novices being initiated, but to the continual processes whereby an ambiguous cast of relative newcomers and relative oldtimers (re)produce themselves, their practices, and their communities" (xi). In fact, in this process the "oldtimers" are defined by the fact that they *expect* to negotiate, to work with gray areas, to critically apply general knowledge to context—this defines, at least in part, their expertise. Rather than acquiring a set of conventions or approaches associated with a fixed discourse community, our students would need to develop that flexible expertise in order to successfully transfer their writing and speaking knowledge.

Our structures and practices

The IWR today has an institutional structure, course sequencing, diverse disciplinary inflections, and faculty practices that are all already priming us for a curriculum that intentionally fosters knowledge transfer. We will consider these here, noting the degree to which these conversations have begun to infuse our work and what has not yet developed, before describing, in the following section, our imagined program directions.

As noted earlier, the establishment of the Institute for Writing and Rhetoric as an autonomous structure was an important moment in the evolution of our program, in that our autonomy created new opportunities to define our outcomes, to shape our conversations, to determine our practices, and to assess our students' work. This autonomous structure also brought together Dartmouth's disparate writing courses under a single administrative umbrella, enabling us to begin building a coherent program—one that can permit, among other things, regular opportunities in the program's faculty development workshops to discuss and assess transfer of knowledge and know-how. For instance, faculty teaching in our first-year writing sequence have begun to discuss their teaching practices and how these practices might encourage (or discourage) transfer. Speech professors in the Institute are learning about possibilities of speech transfer from their writing faculty colleagues. Seminar faculty also teach courses at the upper levels, and so can bring to our conversation about transfer their perspectives on how students are adapting, transforming, orienting, and re-imagining their knowledge about writing both in the First-Year Seminar and beyond.

While the structure of the IWR as an autonomous program has helped to create an exciting environment in which to explore the transfer of knowledge and know-how, it is the unusual structure of our two-term sequence that deserves closer consideration. The Institute's course sequences pose both challenges and opportunities with transfer. We've learned from our own research that any program aiming for coherence across its course sequence must understand both the *hows* and *whys* of transfer: not only how learners do transfer knowledge from activity to activity, but also how and why they often do not transfer knowledge successfully to a new context. This understanding is essential if we ever hope to build the necessary conditions for learners to transfer knowledge successfully. What makes Dartmouth's two-term sequence so potentially ripe for enabling transfer (and the study of transfer) is that our students, moving from one classroom to another, discover that writing is a way to move among different communities of practice—the first introducing them to the practices of academic writing more generally; the second situating them within a discipline that employs practices that are relevant not only to the discipline at hand but that exist in relationship to other disciplines as well (see sample syllabi, Appendix 2 [dartmouth-sample-syllabi]). Across the two writing courses, students, therefore, come to understand college not as "an" academic community but rather as the "set of relations among persons, activity, and world, over time and in relation with other tangential and overlapping communities of practice" mentioned earlier (Lave and Wenger 135).

Students are thus encouraged to work deliberately across situation and across domains. We know from the scholarship that bringing ideas, concepts, and practices from one domain into another demands a "significant cognitive retooling" (Tuomi-Grohn, Engestrom, & Young 4) that appears to foster transfer. It also more easily invites students to undertake an exercise in metacognition.

In addition, in Writing 5 and Writing 2-3, students can be encouraged to look ahead to the seminar; in the seminar, they can be encouraged to look back to Writing 2-3 and 5. With this forward and backward looking should come a bigger, better understanding of how knowledge and practice work together to enable a student to write effectively in many different situations and contexts. The fact that First-Year Seminar (FYS) faculty are from almost every discipline at Dartmouth contributes directly to this possibility. Writing 2-3 and 5 faculty are in conversation at least some of the time with FYS

faculty, who are themselves grappling with the discipline (including the content), the writing, and the in-between-ness of a seminar (whose objective is not full disciplinary integration). In addition, FYS faculty can see anew both the writing they ask their students to do in their other contexts and the unique challenges of the first-year writing classroom. By working through the kind of knowledge and practice that each writing task requires, students and faculty should be able to collaborate to construct understandings of what does and does not transfer from discipline to discipline, from task to task, or from course to course.

Unlike writing courses, all speech courses are optional, and no speech courses have prerequisites. Consequently, the speech component of the IWR does not have a system that enables us to track evidence of transfer from speech course to speech course. And yet, we note that some students *do* take multiple speech courses, by choice. In these instances, a student will usually complete Speech 20: Public Speaking, and then later enroll in an upper-level speech course, such as Speech 30: Speechwriting or Speech 31: Rhetoric of Social Justice. Anecdotal evidence reported by Speech faculty suggests that students are successfully adapting their speech work to changing rhetorical situations and expectations. Informal conversations with students also suggest evidence of knowledge transfer from speech courses to their programs of study across disciplines and beyond the classroom, with student self-reported success in scientific presentations, for example, or in extra-curricular speaking engagements. That is, at least anecdotally, we see potential evidence of successful speech transfer. Also, student discussions in speech courses often turn to comparisons and contrasts with their writing experiences in FYS, Writing 2-3, or Writing 5, as students explore for themselves how their writing informs—or does not seem to inform—their speech, and vice versa.

Other issues of writing transfer have what appear to be clearer analogues to speech. The same autonomy of the Institute that encourages conversation and collaboration across disciplines fosters conversation and collaboration across the Institute—bringing together writing and speech faculty with similar intellectual pursuits and pedagogical aims. Scaffolding and active learning-informed pedagogy—fundamental to writing transfer across courses and disciplinary boundaries—are reflected in individual speech courses, as students build toward more complex speeches through carefully sequenced assignments and peer collaboration. The Institute's speech curriculum encourages metacognition, with reflective assignments (e.g., evaluation activities before and after speeches) that foster students' awareness of their decision-making. Faculty from across disciplines teach some writing courses; speech courses are taught only by speech faculty in the Institute. Nevertheless, through professional development sessions, interactive faculty workshops, and conversations with the disciplines (Compton), we are exploring issues of transfer that go well beyond speech courses.

In terms of the Institute's structure and implications for speech knowledge transfer, the main point is this: Writing and speech are inextricably linked in the Institute; writing and speech faculty are pursuing similar intellectual inquiries, grappling with similar challenges, and sharing similar pedagogical aims. And because we are working together, in conversation and collaboration, what we discover about transfer in writing helps to inform what we discover—or might discover next—about transfer in speech. It's quite possible that we'll learn that writing transfer does not always parallel speech transfer—but thanks to the structure and composition of the Institute, we're in a unique position to find out.

But our programmatic structure is not the only thing to consider as we look for opportunities for (and obstruction to) transfer in our writing and speech courses. We must also look to our practices. In terms of our current on-the-ground faculty practices in Writing 2-3 and 5 (see sample syllabi, Appendix 2 [dartmouth-sample-syllabi]), some methods and assignments are already designed to facilitate students' knowledge transfer and others are not. Nevertheless, we do have the advantage of collaboratively designed course outcomes that help us to think about how transfer might be better

facilitated.{3} [#note3] Broadly, the purpose of an outcomes document is to identify the capabilities students should be able to demonstrate while completing a particular course. However, while these documents offer insights into the desired outcomes, they do not directly define practices. A recent self-study for a regular external review helped us to identify the most common faculty practices in the Writing 2-3, 5, and Speech parts of our program. The Writing 2-3 and 5 courses and Speech courses are using practices that could easily shape to fostering transfer—and perhaps already do: discussion, small group discussion, peer review, Blackboard-based and other web-based interactive tools, performance-based or role playing methods, writing workshops, debates, student-led discussion, oral presentations, collaborative learning, interdisciplinary approaches, regular group work activities, and frequent external visits to many college events and museum exhibitions, for example. These are all practices that lend themselves to scaffolded, metacognitive work and enable the "legitimate peripheral participation" that evolves into expertise—at least into contingent expertise that will itself need to transform across contexts. Particularly interesting is that 50% of the IWR writing and speech faculty report incorporating multimodal assignments into their classes, an activity that can connect students to "real world" motivations and can develop knowledge transfer across modes of expression.

While none of these practices is surprising for good writing and speech instruction, few have been intentionally designed for fostering the possibility of knowledge transfer. They are grounded in goals that may not be explicitly identified but are theoretically rich. Writing and speaking, our faculty report, are ways of coming to terms with complexity; they offer critical examination of epistemological and cultural assumptions; they develop intercultural awareness and foster active learning. Writing and speech *courses* enable the democratization of knowledge; they teach the methodological process of conscientious inquiry, logical analysis, and creative interpretation; they allow students to enter the ongoing conversation of academic scholarship, developing them as rhetorically flexible, active producers of knowledge; they help students to become deeply attentive citizens. It is not difficult to see how these practices and aims are concordant with a programmatic attention to transfer as a core underlying objective and a guiding force—especially in their emphasis on the "rooted relevance" of learning and their attention to the relationships among students, classroom contexts, and the real world.

We also see which transfer-fostering practices noted in the research might be less in evidence: notably, teaching by analogy, teaching for "boundary-crossing," and certainly ensuring ample time for initial knowledge development, given our ten-week terms. And finally, we recognize in these programmatic practices what might be hampering transfer: most importantly, the degree to which courses are insular, and the fact that learning "to write" or "to speak" is still sometimes seen as a generic ability that can be acquired in one context and reused everywhere. To put it another way, perhaps a key obstacle to facilitating the possibility of transfer in our courses is the general practice of teaching students in a given course without deep understanding of the diverse ways their knowledge will be called upon, will need to transform, will grow and evolve in new contexts. And the second key obstacle might be the lack, in each new context, of affordances that allow students to put their knowledge to use.

Our broader institutional goals and the faculty's stated practices indicate clearly that further investment in the study and practice of knowledge transfer makes sense for the Institute. This direction builds on the strengths of our program, but also on current needs. We acknowledge that the practices in use in the FYSs are less broadly known, a key area for development in the work that lies ahead. Our courses include diversity of practices, and faculty seem to recognize—most clearly when they teach in more than one of our courses—the possibility that students are not always transforming and reusing knowledge from one course to the next. These conditions are important to imagining our next steps. In this environment, explicit discussions about transfer can enable faculty to engage with the theories that underpin their practice. It is a logical progression from these frames to an intentional

design based on evolving research about knowledge transfer and what we have begun to call "rhetorical flexibility" in speech and writing.

A program broadly imagined

To design a program that intentionally fosters the possibility for transfer as we define it and as the transfer literature frames it, the IWR needs to collectively explore all facets of our program. The actual structural and curricular decisions that the IWR faculty and leaders make would, we believe, impact curriculum, faculty development, outcomes, and cross-curricular faculty communication. Faculty teaching the two-course requirement at Dartmouth would need to be intimately familiar with the criteria for intentionally fostering transfer. Institute faculty would require opportunities to further immerse themselves in this work—drawing on and discussing scholarship from various fields that will help them to frame an assessment project, generate and answer assessment questions, carry out assessment, interpret assessment results, and implement potential improvements. Many of these activities would be possible through ongoing professional development, through new initiatives, through growing attention to writing and speaking across the disciplines, and through progressive re-imagination of our curricular designs in Writing and in Speech. The project's central assessment questions could help faculty understand better how transfer functions in these new contexts. Work with writing could inform future transfer work with other modes of communication, including speaking and multimodal communication.

If the knowledge about how to foster opportunities for transfer were to be the foundation for Dartmouth's program, we would imagine it to look something like this:

Guiding Principles, Core Values, and Outcomes

- Writing and speaking are collectively understood as ways to acquire and construct meaning, to navigate the slippery networks of human activity.

- Students' growth as writers and speakers is not expected to be linear but instead is understood as an expansion of abilities that move back-and-forth between global strategies and specific expertise.

- Rhetorical flexibility becomes a core value in all contexts; students who are writing experts expect to negotiate new contexts, to create hybrids, to tolerate ambiguity, and to persist when tasks are challenging.

- Every course intentionally affords writing and speaking knowledge transfer.

- Discussions of program outcomes are ongoing, transparent, and publically negotiated.

Curriculum, Course Design, and Pedagogy

- The overall curriculum offers frequent intentional opportunities for "boundary-crossing"— which research suggests as a way to afford transfer.

- First-year writing is required in a two- or three-course sequence; students are broadly encouraged to take speech courses; every first-year student can choose an additional term of direct writing instruction (Writing 2-3).

- Every teaching practice—from syllabus and assignment design, to course activity, to response to student work, to evaluation—draws on the acknowledged principles for enabling transfer, including teaching driven by analogy, scaffolded learning, attention to inspiring motivation, and sufficient time given to cementing initial learning for new knowledge.

- Students are offered sustained opportunities to work on multimodal meaning-construction and communication.

- A portfolio (or similar tool) is designed to move students to be conscious of their growth across courses and to account for their knowledge as it evolves. More than just a token moment of self-reflection, this portfolio is carefully integrated to emphasize intentional learning as a central goal of the program.

Faculty Support, Development, and Research

- In order to accomplish all of this, faculty development builds upon the foundations of knowledge transfer, engaging faculty from all disciplines and courses in ongoing exchange. Ongoing research—about the ways students are transferring their writing knowledge across modes and disciplines and from the classroom into "real-world" settings—is actively supported and reported. We thus envision a broad research agenda, one that tackles questions of transfer among modes, disciplinary settings, and even workplace or other non-academic contexts.

- We also make better use of the programmatic structures we have. Our unique sequence of Writing 2-3 or 5 and then the discipline-infused FYS is the perfect sequence for identifying the knowledge and know-how that thread through both courses, that are specific to each, or that thread through but also transform from one course to the next in diverse ways. This understanding serves as a foundation for thinking and writing across the rest of the curriculum.

Student Support and Institutional Participation

- Student writing support staff participate in the conversation about transfer and are both educated in the principles of transfer and schooled in the practices that encourage transfer.

- Writing and speech in courses beyond the first year receive sustained, embedded attention; designated writing courses are available across disciplines; deep attention to the writing and speech involved in culminating experiences is offered to all, with that experience simultaneously pointing forward to workplace, graduate, and other next-stage experiences.

- Writing and speaking in other student experiences—off-campus programs, co-curricular activities, etc.—are attended to and celebrated.

To be clear, Dartmouth's IWR has not yet determined that this is the path to follow. We must collectively explore the values and benefits, as well as the predicted effects, of this global approach. We are, however, already exploring, testing, and implementing parts of this approach in order to determine our best choices; the rest of the profile will discuss our current activities.

Our processes, now and again

The program just outlined is in the initial phases of implementation. In this section of the profile, we focus on first-year initiatives and developments that we hope will become the foundation for a future program informed by our understanding of transfer. Our work over the past few years has focused

particularly on stimulating discussion of course outcomes, promoting a research-based understanding of student writing development, and increasing opportunities for multimodal composition in the first-year writing classroom. These efforts have been important in helping us build toward our future programmatic goals.

The Davis Study of Student Writing

In 2009, Dartmouth's Institute for Writing and Rhetoric was competitively awarded a $200,000 grant from the Davis Educational Foundation to address questions of course coherence and transfer in order to improve the effectiveness of our first-year writing program. Supported by Davis funds, the IWR launched a three-year study of first-year writing at Dartmouth, motivated by two important and related questions—*How do students transfer knowledge about writing from course to course and task to task? How does composing with new technologies improve the transfer of more traditional writing abilities?* To answer these questions, we have undertaken a large-scale study of first-year student essays. This study has given our leadership team, and our Institute as a whole, an opportunity to map the present and cast an eye to the future. Fundamentally, we understand the study as a flexible and comprehensive approach to program and faculty development that relates closely to the goal of "building upon the foundations of knowledge transfer, engaging faculty from all disciplines and courses in ongoing exchange" (from the Davis Foundation Grant Proposal). By giving our faculty an opportunity to explore research-based perspectives on student writing, to design and test new approaches, and to engage in ongoing conversation about the results of their efforts, we hope to promote a flexible and informed teaching culture that will facilitate the possibility of transfer.{4} [#note4]

Preliminary Work

During the summers of 2010-2012, volunteer groups of faculty gathered to identify outcomes shared across our first-year courses and to read a stratified random sample of first-year student papers for evidence of those outcomes.{5} [#note5] Knowing that students are better able to transfer learning when first guided to understand the relation between previous and current writing tasks, we feel confident that the initial step of identifying the outcomes that span our courses is invaluable. In identifying a shared outcome across first-year courses—for example, the ability to integrate and use sources effectively—we are earmarking a general similarity among course contexts and leaving room for future discussion of specific, contextual differences. In doing this work together as a faculty, we are also developing our ability to see the question of transfer in shades of gray. Students may be using a similar strategy, for example, but are using it in a different way, to a different purpose, and with a different set of teacher expectations. The work also provided a useful model for creating speech program learning outcomes. Early and ongoing work already suggests interesting areas of overlap, but also divergence, between outcomes in writing and speech.

Methods and Results

With its central interest in describing college students' writing development across course contexts, our study shares common ground with qualitative studies like Elizabeth Wardle's work on "Transfer in FYC," Lee Ann Carroll's *Rehearsing New Roles*, and the host of other excellent longitudinal studies mentioned in the section above. Ours, however, is a larger-scale study with a quantitative dimension. We are also analyzing our sample of student writing with less contextual information about the pieces of writing than is typical in longitudinal studies.{6} [#note6] We also differ from previous studies in the degree of our emphasis on student self-report. While many related studies make extensive use of interviews, we are working primarily with student writing without student

commentary. This approach fits our goals, as our study is as much about our own program and our ways of perceiving and evaluating student work as it is about the students' perspectives.

Since 2009, we have been collecting the first and last source-based assignment from all of our first-year writing courses. We define *source-based* broadly, including any writing in which students engage with a source, including summarizing sources, analyzing sources, and writing their own full-blown research papers. Out of those papers we generate a stratified random sample from across the four possible course sequences, which includes the first and final papers from approximately fifty students in each cohort across their first year. We then norm (achieving from 77% to 100% agreement in our coding, depending on the feature) and code this sample of full papers with a descriptive coding rubric derived from our course outcomes. The rubric captures a range of information about each paper's structure, the nature and location of its thesis statement, introductory and concluding strategies, and type of evidence used. We also code smaller excerpts from the same sample for information about paragraph structure, source integration, and some grammatical errors. The two approaches to coding work together to give us a range of information about student writing in first-year courses. Meanwhile, we gather information about how students read their sources from an even smaller sub-set of papers (five students from each course sequence), which we study using a modified version of Citation Project methods.{7} [#note7] We plan to layer these results with other sources of information, including three years of responses to the writing-specific questions of the National Survey of Student Engagement survey and relevant institutional data.

The Davis Study has already produced results that offer insight into student writing. Though quite tentative, the results to date are intriguing in terms of understanding what students appear to use and adapt from the first writing course to the second. They suggest that the students are using the general strategies identified by the outcomes—like the ability to craft a thesis, use evidence to support that thesis, and integrate source material—across their course sequences and across course groups. Indeed, we've discovered some clear trends in how they use these strategies:

Regarding argument

In overwhelming numbers, students use a few key structures for argument—particularly, the traditional thesis-driven essay structure with an explicit thesis at the beginning of the paper and body paragraphs supporting the thesis.

Regarding organization

More specifically, most students are writing using one of two major organizational strategies, which we identified as "linear argument-driven" or "critical thesis-driven." Both of these are thesis-driven arguments, but the first primarily reports source content while the second critically engages with sources. These two organizational strategies account for anywhere from 60 percent to 90 percent of the papers submitted, depending on the course sequence (60 percent for the first paper in Fall Writing 5; 90 percent for the final paper for first-year seminar students exempted in the fall).

Regarding evidence

The two most commonly used types of evidence are "interpretation of a primary object of analysis" (this includes a range of possible objects—literary texts, architecture, works of art, non-fiction documents…) and "report from an authoritative source." The least used is quantitative data. This is generally true across course types and course sequences.

Regarding content

Case study results of individual students suggest that students appear to seek out opportunities to write about similar topics from similar angles across the two courses, which might account for some of their re-use strategies.

At this point, we can say less about the level of sophistication or fluency with which students are using these general strategies, since we were not measuring these degrees in our initial reading. The fact that the majority of students draw on similar strategies for argument structure and evidence across the sequence of writing courses could also suggest a few possible hypotheses and areas for further inquiry:

- At the level of general, descriptive categorization, the first-year writing sample is somewhat uniform. For better or for worse, students are using similar organizational strategies from task to task and from course to course. This finding supports David Smit's hypothesis in *The End of Composition Studies* that students may be more likely to transfer general, rather than specific, strategies from first-year composition, which in turn may have less future potency for them in new situations than more context-specific strategies might.

- A preliminary look at the data also suggests that the epistemological and conventional differences in student writing across the sequence of writing courses may be more subtle than we might have expected. The fact that most students are neither using data as evidence nor using discipline-specific structures for organization, for instance, suggests that within their seminars they are not entering fully into the disciplinary conventions for writing that they may confront in the future.

- What our current coding system does not capture as clearly are the subtle modifications and revisions that students may be making within the broader strategies we've studied as they move further into college life. We have earmarked general similarities in, for example, the organizational strategies used in different courses, but we hypothesize that these strategies present differently when examined more specifically.

In our ongoing analysis of results, we are careful to keep in mind that the apparent resurfacing of common strategies in different contexts does not necessarily point to any evidence of transfer (defined as a transformative activity, closely tied-in to the student's learning process) in part because, as Elizabeth Wardle points out, "If we do not know how students understand and respond to tasks and contexts, we have no basis for identifying and interpreting generalizing behaviors that might be considered forms of 'transfer'"(72). It does, however, point to the power of these strategies, perhaps by virtue of their very generality, to re-emerge in very disparate contexts and different assignment types. As we mentioned when describing the study methods, the collected papers represented a huge range of assignment types, yet nevertheless, students favored a "preview style" introduction over all other types. This tendency prompts us to wonder: Are we really seeing uniformity, or subtle, not-yet-fully captured transformation, or some combination of the two? Our initial results hint at possible influences on students' composing choices, influences that might even work **against** the likelihood of students trying new approaches in new situations. In other words, they are in large numbers sticking to the same strategies, even as their writing circumstances transform.

Additional Davis Study initiatives

In addition to the study of student writing as a way to engage faculty in curricular thinking about transfer, two curricular pilots supported by the Davis Study have begun to support teaching for

transfer by fostering faculty exchange and encouraging attention to rhetorical flexibility. The first, a multimodal pilot, supports faculty already committed to teaching digital composing as they work to create faculty development opportunities for fifteen of their colleagues who are new to teaching multimodal composition. These faculty leaders offer a workshop for their colleagues that provides them examples of tested multimodal assignments. The leaders then mentor their colleagues in designing and piloting their own assignment. In this process, the outcomes documents provide a crucial bridge between multimodal and more traditional writing assignments, encouraging faculty to recognize analogies between these different kinds of composing. They also provide a basis for later assessment and comparison between multimodal and traditional composing tasks. Recalling that students may be better able to transfer writing abilities when they are applied in multiple contexts and connected to real world experience, we sense that multimodal work might serve to help students increase their rhetorical flexibility, which will ultimately help them transfer learning to new contexts. To date, the assessments of pilot activities have borne this out, as faculty who teach these assignments report in post-pilot assessment reports that students do both reuse and adapt the multimodal strategies to other compositions, and note that they have better understood traditional rhetorical choices.

The second pilot builds explicitly on an advantage that we have underexploited: the two-term sequence. It supports pairs of faculty interested in linking their first-year writing and FYS courses into one cohesive learning experience for our students. Faculty are not co-teaching, in the sense that they are not in the classroom together. Rather, they are co-constructing learning environments that may improve students' ability to transfer writing competencies from one course context to the next. The research suggests that students need explicit scaffolding and extended time for learning to "take." It also suggests that students will be better able to transfer (or transform) old knowledge in new contexts when faculty create affordances for them to do so. Collaborative course design makes these criteria far easier to meet.

Professional development has also been redesigned to more actively work through questions of knowledge transfer, writing and speaking instruction, research instruction, and classroom work. Faculty from different types of courses attend together, to develop collective understandings of writing and speaking instruction, and to share across course types. In the process, they learn from each other—a key exchange, given the importance of faculty understanding what other faculty are doing so that they can explicitly draw on that knowledge in their work with students. The Davis Foundation-supported work served this same purpose, results aside. In the literature review groups, the norming and coding sessions, and the subsequent workshops with faculty who provided papers for the study, faculty from Writing 2-3, Writing 5, Speech, and FYS have come together to read scholarship and discuss it, to hash through criteria for coding, to explore and scrutinize student work with an eye to simply describing what we see, and to learn about the research methods used.{8} [#note8] One faculty member attests to the valuable effect of Davis Study participation on her ability to teach for transfer:

"I've moved away from the very comfortable 'sage on the stage' model to the much more anxious-making effort to transfer much of what happens in the class to my students. […] As part of a Davis-funded research review project, I chose to read about 'knowledge transfer' and summarize a series of readings for my colleagues. I was *astonished* to learn how I had been undermining knowledge transfer, not only in Writing 5, but in every class I offer. In the last year, I've begun to incorporate what I learned into each course."

Additional initiatives are well underway. For example:

- We have begun to work with an existing linked program, Humanities 1-2, to develop ways to ensure long-term investment in the linked course model, which is so clearly likely to foster students' reuse and transformation across two courses.

- We are considering developing a first-year portfolio that will encourage faculty across courses to enhance their knowledge of students' work, and will encourage students to see the growth in depth and diversity of their abilities.

- We see potential in communication between writing and speech faculty to foster understanding of how spoken and written competencies might inform each other, both in what they share and in each one's unique nature.

Finally, to ensure the long-term value of what we teach, we know we must design course materials and teaching approaches that facilitate knowledge transfer *beyond* the first-year sequence and the classroom. This phase of program design is in its earliest stages. In 2012, Dartmouth will focus on building faculty attention and awareness to writing beyond the first year. The College is sponsoring a group of faculty from across disciplines, in collaboration with consultants, who will work together to share the methods they use for teaching writing and to develop useful curricular models for their colleagues. The knowledge built about first-year students' work—and in particular the knowledge we gain about transfer—will be foundational to this project.

These initiatives do face real material constraints, likely to play into the program's growth and development.

- Faculty perception outside of the IWR of Writing and Speech as "service" and not disciplines in their own right can contribute to resistance to initiatives that build on research and demand investment; similarly, the IWR faculty as a body are not convinced that building from research to develop a coherent curriculum is the best avenue.

- The faculty who teach in the different segments of the program are a mix of tenure-track, full-time lecturer, and adjunct faculty, a mix that poses interesting challenges in terms of faculty exchange and development, in part due to differences in time investment available to those who teach writing occasionally and those whose entire focus is on Writing or Speech. The challenge posed by different levels of investment is already being addressed through projects like the Davis Foundation work and through ongoing professional development, as we've mentioned.

- On a more basic level, challenges are logistical. For example, the introductory writing courses' class size did not match the FYS size until 2012, making linked courses harder to arrange.

We suspect these are challenges far from unique to Dartmouth, sure to be shared by any program considering building a curriculum that intentionally fosters opportunities for transfer. And if these challenges cross campuses and disciplines, programs and departments, program philosophies and research agendas—then that's all the more reason to take them on.

Conclusions

The stages of development described here have shown us some key insights into the kinds of planning that might be useful to other programs thinking about structuring a program so as to intentionally foster transfer. What is perhaps most interesting is the degree to which these kinds of planning apply to almost any type of program development. First, planners must enable broad faculty investment in the questions to be addressed and the knowledge base to be developed. Second, a smaller team must coordinate efforts and activities. That team must include members with strong relationships with

faculty more broadly and must be open to learning. Third, every part of the process must be imagined as a form of faculty development. Fourth, there must be space (time, resources) for initiating on-the-ground research or at least solid research review.

We can imagine many programs within Dartmouth that might engage in a curricular project using the principles of transfer to support stronger programs: language departments looking to create the possibility of fostering transfer across language levels; specific disciplines like Linguistics, English, History, and others that require writing across almost every required course for majors; intra-disciplinary initiatives, such as a recent pilot Biology-Chemistry course sequence using writing as a key tool for learning; and inter-disciplinary programs and departments that have cross-listed courses, such as Comparative Literature. Other writing programs across the country could find our process useful as they work through shared issues of program design. Although every program is unique, offering different ways to teach and learn writing and speaking, we are all looking for the golden key of coherent, sustained student development over time.

Perhaps equally important is our acknowledgement of what we don't know here in the IWR, and what the field more broadly does not know. The dangers of developing any program based on research knowledge include a too-quick "application" of scholarly ideas and research conclusions to classroom activities. While the subject of knowledge transfer now has a long history, its specific exploration in terms of students' writing and speaking in college is more recent. Longitudinal studies that should provide strong insights have not been widespread in the past, and the scholarship about knowledge transfer more generally is dynamic, in flux, acquiring new layers all the time (see other articles in this issue for examples). Writing programs, on the other hand, are not known to be nimble adapters; the institutions into which they are integrated are more often cargo ships than schooners. A new program design might not be able to flex with the new knowledge that develops in the field; simultaneously, new knowledge might be too quickly accepted. Our overall path has thus been, and will continue to be, one of cautious building from the strong foundation we have, persistent exploration of new possibilities, deep attention to evolving knowledge, and creative testing and implementation of the pieces that can lead to a coherent overall institution-wide investment in the programmatic design that offers our students the best opportunity to "transfer" their writing and speaking knowledge over time and context. Stay tuned!

Appendices

Both appendices are handouts, so they are delivered as PDF only.

1. Appendix 1: Individual Section Descriptions for Writing and Speech Courses [dartmouth-course-descriptions.pdf] (PDF)
2. Appendix 2: Sample Syllabi for Writing 2-3, Writing 5, and First-year Seminar [dartmouth-sample-syllabi.pdf] (PDF)

Notes

1. Kitzhaber's report contained a sixty-page addendum, *The Writing of Dartmouth Students After the Freshman Year*. Interestingly, while Kitzhaber carefully details the worsening of student writing after their first-year writing courses, he nowhere argues that professors outside of English be responsible for teaching writing. Rather, he advises professors in other departments to assign more papers and to give punishing grades as a way of ensuring that high standards/good writing are maintained at Dartmouth. (Return to text. [#note1-ref])

2. The general descriptions of the Institute for Writing and Rhetoric (IWR) and its three writing programs are as follows:

   —IWR http://www.dartmouth.edu/~writing/courses/ [http://www.dartmouth.edu/~writing/courses/]

   —Writing 5 http://www.dartmouth.edu/~writing/courses/writing5/about.html [http://www.dartmouth.edu/~writing/courses/writing5/about.html]

   —Writing 2-3 http://www.dartmouth.edu/~writing/courses/writing2-3/about.html [http://www.dartmouth.edu/~writing/courses/writing2-3/about.html]

   —FY Seminar http://www.dartmouth.edu/~writing/courses/firstyearseminars/about.html [http://www.dartmouth.edu/~writing/courses/firstyearseminars/about.html] (Return to text. [#note2-ref])

3. The outcomes for each writing course are as follows:

   Writing 5: http://www.dartmouth.edu/~writing/writingfiveoutcomes.html [http://www.dartmouth.edu/~writing/writingfiveoutcomes.html]

   Writing 2-3: http://www.dartmouth.edu/~writing/writingtwothreeoutcomes.html [http://www.dartmouth.edu/~writing/writingtwothreeoutcomes.html]

   FY Seminar: http://www.dartmouth.edu/~writing/first-yearseminaroutcomes.html [http://www.dartmouth.edu/~writing/first-yearseminaroutcomes.html] (Return to text. [#note3-ref])

4. This, incidentally, models active learning itself; that is, through the work of this research, we are practicing what and how we teach. (Return to text. [#note4-ref])

5. As a preliminary step to this activity, we collected the first and last paper that responded to a text from every student in every first-year course (including the Writing 2-3, Writing 5, First-Year Seminar and Humanities 1-2). We have been fortunate to have a very high rate of collection in both years. (Return to text. [#note5-ref])

6. IRB approval for this study requires complete anonymity of student work, a fact that is important for several reasons. Primarily, since we see this work as an avenue for faculty development and precursor to future assessment, it is vital that all concerned understand this work to be a study of student writers, and not courses or instructors. This understanding is important to encourage a high rate of paper collection and ensure good faith within the Institute as a whole. (Return to text. [#note6-ref])

7. In the first year of the study, we were fortunate to be a participating institution in the Citation Project, led by Rebecca Moore Howard and Sandra Jamieson. In the second year of our study, we have undertaken follow-up research that looks at patterns of source use across first-year course contexts. (Return to text. [#note7-ref])

8. We note again here that the activities we're using to study transfer and active learning model what we're trying to do in our classrooms: dialogue, action, critical analysis, theory-guided discoveries. (Return to text. [#note8-ref])

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