Threading Competencies in Writing Courses for More Effective Transfer

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This article contributes to current conversations about transfer, specifically how WAC courses can encourage vertical transfer (Melzer). The authors draw on research in learner development that demonstrates how a threaded curriculum approach helps students learn concepts and skills and apply that knowledge in multiple contexts. Additionally, a threaded curriculum can incorporate pedagogical elements that have been linked to effective transfer, such as abstract conceptualization and metacognition. The authors present an instructional model for sequenced writing courses that leverages this research and moves away from disconnected writing courses. The threaded curriculum explored here promotes vertical transfer between an introductory professional writing course and a professional writing internship course. Both classes explicitly thread common competencies (which the authors define as purposeful combinations of concepts, skills, and learning dispositions) and common pedagogical activities (experiential learning and reflection) throughout the curriculum. Though designed for professional writing courses, this threaded-competencies curriculum offers a pattern that can be adapted for WAC courses in any discipline.

Introduction

Transfer—how students use (or don't use) the knowledge and skills they learn in class in new contexts—dominates current conversations in all academic disciplines, including writing studies (Beaufort, Moore, Nowacek, Wardle, Yancey, et al.). Yet, Dan Melzer notes that much of the transfer literature focuses on what "individual instructors can do to encourage transfer" in a "lateral" way—particularly from first-year composition to other college courses (76). This focus may have resulted in less attention being paid to how knowledge transfers "vertically" as students progress to more advanced writing situations both in the university and the workplace. To encourage a more cohesive and comprehensive conversation, Melzer proposes the idea of a *vertical transfer writing curriculum* that encourages transfer both laterally (between first-year writing and other courses) and vertically (between increasingly

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advanced writing contexts). He reports his institution's efforts to create such a curriculum through several programmatic changes, including allowing students to fulfill their writing-intensive course requirement by taking a series of classes within their major.

Melzer offers few details of how departments might design these course series, but as teachers of professional writing we find his idea provocative. We believe faculty can work together to help students transfer knowledge and skills "vertically" to more advanced writing situations in both the university and the workplace. While we have conceptualized our collaborative framework in terms of writing across the curriculum, it is relevant to all teaching-and-learning enterprises across campus.

We see the problems of both lateral and vertical transfer in many of our students who are acquiring a particular set of communication skills and working toward professionalization. Even as these students develop writing knowledge and skill, they approach new writing courses and contexts with trepidation, unsure of their ability to succeed with unfamiliar and often more complex writing tasks. In part, their apprehension seems to arise from past experiences of being "batted back and forth between . . . noncommunicating assumptions and views" about writing as they have moved between classes (Graff 28). Unfortunately, we found that this "volleyball effect" occurs even within a Professional Writing and Rhetoric minor offered through the English department at our university. Our students, who come from a variety of majors, are required to take several writing courses within the minor. But even after completing these courses, students sometimes report finding it difficult to recognize how their knowledge and skills might transfer "up" as they move to what feel like riskier writing situations such as advanced courses within the minor and professional writing situations. To address this problem, we created a course sequence that aligns with Melzer's principles for vertical transfer writing. This paper describes our coordinated course sequence and the process we used to create a cohesive curriculum and pedagogy. Although we teach this curriculum in an English department, it can be adapted for sequenced writing courses in any discipline.

We accept that time spent developing writing skills in multiple courses certainly plays a valuable and needed role in preparing students for new writing contexts and tasks. However, we also agree with Melzer that lateral and vertical transfer are more likely to happen if the curriculum intentionally incorporates elements that support transfer. These elements include instruction in abstract concepts, multiple and varied opportunities to apply those concepts in different contexts, prompting that explicitly cues transfer of abstract concepts, and metacognitive activities that ask students to reflect on the reciprocal relationship between their abstract learning and concrete experiences (National). Our course design incorporates these elements by creating two curricular strands. The first strand is a reformulation of the idea of competencies,

which we define as a combination of conceptual knowledge, skills, and learning dispositions. The second strand is a pedagogical approach that emphasizes experiential learning and reflection. We weave these two strands or "threads" through our two-course sequence. Threading competencies and an experience-reflection based pedagogy through a sequence of writing courses, we argue, can help students transfer knowledge across "lateral" and "vertical" writing contexts. Again, we describe courses in professional writing, but a threaded-competency curriculum is appropriate for courses across the curriculum.

Threaded Curricula

We borrow the concept of a threaded curriculum from K–12 educators, who developed the model to address concerns about traditional teaching models that overemphasize discrete subjects. These curricula can feel fragmented to students and disconnected from educational theories like multiple intelligences. A threaded curriculum promises a more unified learning experience by establishing "big ideas" that guide teaching and learning across academic subjects (Fogarty 63). In a K–12 context, these big ideas often focus on processes of learning: for example, thinking skills (e.g., prediction or analysis); social skills (e.g., collaboration or listening); or study skills (e.g., critical reading or reflection). These skills, or threads, form a "metacurriculum" for a number of courses—in some ways taking precedence over the unique subject matter of individual classes—which acts as a "vehicle for [the big idea] skills to be learned" (Kysilka 200). For example, at a particular grade level, teachers might establish a thread of information literacy—finding, interpreting, and evaluating information. Math, science, language arts, music, physical education, and even elective classes would then foreground information literacy, giving students opportunities to practice evaluating data with different disciplinary content. In K–12 contexts, threaded curricula appear both at the grade-level and within departments. Threaded models show students that knowledge and skills have lateral relevance (across classes at the same grade level) and, when implemented in succeeding grade levels, vertical relevance as well (in more advanced classes).

Though less common, threaded curricula also appear at the university level. For example, academic departments often link courses around their discipline's "big ideas" or "threshold concepts"—the foundational knowledge, principles, and vocabulary that students need to master as they progress toward expertise within that discipline (Meyer and Land). The literature includes examples of "big ideas" threaded curricula being used in diverse fields—from chemistry (Barth and Bucholtz) to nursing (Lewis et al.) to computer animation (Cumbie-Jones). Additionally, some universities use campus-wide threaded curricula by offering courses in multiple disciplines, all focused on a common theme. The theme acts as a "thread" that students explore

through a variety of disciplinary perspectives. During the 2018–2019 academic year, for example, the University of Chicago offered courses clustered around thematic threads such as inequality, urban design, and history of the law, with classes taught in the humanities and social, physical, and biological sciences.

Of course, the most familiar application of a threaded curriculum at the university level is writing across the curriculum (WAC), where writing represents the "thread" for classes across campus (Fogarty and Stoehr). Though the thread of writing skill in WAC seems obvious, even WAC courses can feel disconnected for students when teachers narrowly focus on disciplinary writing conventions or idiosyncratic concepts rather than more universal writing skills, theory, and practice. If students do not recognize the broad threads that tie courses together, the WAC model may be less successful at promoting vertical transfer (Melzer). By presenting new knowledge in the context of already familiar concepts, teachers cue students to recognize opportunities for transfer (Perkins and Salomon). For example, students who learn a broad social action theory of genre are better prepared to analyze and understand the specific features of a new genre (Devitt "Genre Pedagogies"). Not all instruction needs to be connected across courses. Nevertheless, when making curricular decisions, teachers might ask themselves, "How could this skill, concept, or practice be threaded into another course?"

Our approach to sequenced writing instruction reflects the influence of both university-level and K–12 "threading" practices. Like the WAC model, we created threads that focus on writing skills, and like course clusters we emphasized conceptual knowledge that students explore across different contexts. From K–12 models, we adopted the notion of "big ideas" that represent ways of thinking or learning dispositions. We combined these elements—skills, conceptual knowledge, and learning dispositions—into what we refer to in this paper as competencies. Our skill-knowledge-disposition competencies are explicitly woven across two of our professional writing courses. The competency-based threaded approach of these courses helps students acquire specific skills, understand the theory that informs those skills, and develop dispositions for learning and thinking that lead to the successful application of skills and knowledge in diverse situations. Pedagogically, our courses use a model that draws on repeated cycles of instruction, concrete application and practice, and reflection (Kolb). The experiential-reflective cycle is the second "thread" of our curriculum.

This paper explains how we created and taught a two-course sequence using the threads of common competencies and an experience-and-reflection pedagogy. We call our combination of common competencies and pedagogy a *threaded-competency curriculum*. We suggest that a threaded-competency curriculum—organized around deliberate and transparent sequencing of course content, competencies, and

opportunities for concrete practice and reflection—provides a more coherent and transferable learning experience for students. We also believe that teachers benefit from the dialogue that creating such a curriculum requires. The conversations we had while designing these courses forced us to do things we had sometimes neglected. For example, we had to honestly assess what we think students are able to do after taking our individual classes. While our department publishes learning outcomes for all courses, we realized that we hadn't always considered how the enactment of our individual curricula emphasizes and interprets those outcomes differently. Working as partners on a threaded-competency curriculum required us to be more mindful about what students actually learn in our individual classes. We also had to accept more accountability for how students apply and adapt knowledge from our classes in new academic and non-classroom contexts. Thinking of ourselves as answerable to each other and to our students for how our teaching transfers (not just how students' learning transfers) motivated us to imagine our work relationally—as partnerships with each other, other faculty on campus, and off-campus entities like employers. Having redesigned our courses with a conscious concern for threading competencies, we believe that this approach can be implemented in both writing and non-writing courses across campus.

Competency Threads

The competencies we created for our threaded courses are significantly different than our previous learning outcomes and came to replace those outcomes on our syllabi. In the past, our course learning outcomes were often descriptions of discrete knowledge or skills we hoped our students would acquire. In contrast, our new competencies reflect our desire to show students that professional writing skills are rooted in theoretical knowledge. We also wanted our competencies to acknowledge that successful writers share particular dispositions toward communication (Council). The competencies, then, represent a deliberate articulation (in both senses of that word) of the skills, theoretical knowledge, and learning dispositions students can develop over the two-course sequence. We thus see the competencies as elaborated learning outcomes, or what we might call meta-outcomes.

To determine competencies for our courses, we first identified the professional skills and knowledge we hoped students would acquire by the end of this two-course sequence (Wiggins and McTighe). Writing these down on sticky notes, we arranged the notes into affinity clusters, groups that included relatable skills and abilities needed to succeed in a wide variety of vocational endeavors. Not to be confused with narrow job-training, what we are calling affinity clusters are both practical and devoted to the larger goals we as instructors associate with a liberal education. Our competencies are also inspired by those David Guest articulated in his article "The

Hunt for the Renaissance Man of Computing," an early description of competencies that effective problem solvers and leaders in business possess (von Oetinger). We adapted some of Guest's competencies to better reflect our definition of competency as encompassing skills, conceptual knowledge, and dispositions relevant to writing. Finally, we aligned our competencies with the professional writing discipline and our department's goals for our courses.

Again, our three-part definition of competencies is a core component of our threaded curriculum. We teach our threaded courses in sequence, with Introduction to Professional Writing (IPW) offered fall semester and Advanced Professional Writing-Internship (APW) offered for the winter semester. Both courses use the following competencies:

- Collaboration
- Rhetorical Awareness
- Genre Literacy
- Ethics in Professional Communication
- Leadership

Table 1 shows the relationship between skill, theory, and disposition that forms the framework for each competency. Both courses weave these competency "threads" through the class readings, assignments, and experiential learning activities. Because the competencies remain consistent across courses, students have extended opportunities to develop and practice them. In essence, we used the competencies as the foundation of a curriculum that not only makes skills, concepts, and learning dispositions explicit but also gives students opportunities to practice their knowledge and skills in a variety of contexts, and that supports metacognition, with competencies providing students language for reflecting on how skills and knowledge can be reused, repackaged, and repurposed in more advanced writing tasks (Fogarty and Stoehr).

Table 1:

Competency principles mapped to theory, skills, and dispositions.

Competency	**Theory**	**Skills**	**Dispositions**
Collaboration	A sociocultural perspective of learning recognizes that individuals build understanding, skills, and group identification as they develop proficiency with others (Gee; Shaffer)	Work together to solve problems, create and share content, integrate research and share insights to develop a solution Receive and respond to feedback as group members innovate and venture new ideas to solve communication problems	The willingness to accept **responsibility** for one's actions and interactions with others The willingness to be **flexible** in working with others to accomplish tasks The willingness to be **open** to other ways of thinking and to **engage** with other people and their ideas to accomplish a common goal
Rhetorical Awareness	Rhetoric involves rhetors, audiences, and exigencies (Bitzer) Rhetors create exigencies by selecting and interpreting elements of the situation (Vatz) Rhetoric is an art of topoi that can respond to all situations while being sensitive to the particularities of each (Consigny)	Identify the rhetorical elements of a writing task—rhetor, audience, exigence Analyze the exigence as a selection and interpretation of the context Design a response that is appropriate to the particularities of a specific situation	The willingness to be **curious** about situations in the world The **flexibility** to adapt to different situations, expectations, or demands, to approach writing assignments in multiple ways The willingness to **reflect** on and be **responsible** for one's rhetorical choices
Genre literacy	Genres respond to recurring social situations (Devitt "Generalizing") Genre is social action (Miller) Genre is a reflection of discourse community norms, epistemologies, ideologies, and social ontologies (Berkenkotter and Huckin)	Identify the social situations to which genres respond Describe textual features as a response to a social situation and evaluate the flexibility of those features Describe the social action the genre accomplishes and experiment with generic responses to specific situations	The desire to be **curious** about generic forms and social situations and to use new methods to investigate questions, topics, and ideas The ability to **reflect** on one's own thinking and the individual and cultural processes that structure knowledge The ability to be **creative and flexible** in adapting genres for specific situations, expectations, and demands

Ethics in Professional Communication	Professional communicators follow ethical principles (Society) Ethics guide decision making (Markel) Ethics includes rhetorical strategies writers use (Duffy)	Critically examine examples of professional communication from various ethical perspectives Evaluate the competing demands professional writers face to produce useful, effective, and ethical communication Evaluate one's own writing choices as ethical decisions	The willingness to be **accountable** to others, to take **responsibility** for one's actions and the consequences of those actions The willingness to be **metacognitve** about the ethical beliefs and perspectives that motivate one's decisions
Leadership	Leadership is a process of influencing others (Taylor) Elements of leadership include forming a shared vision, aligning resources to accomplish that vision, and working to build commitment to that vision (Northhouse)	Create a shared vision to address a client's needs Develop strategies for idea structuring and goal setting (Mumford) Align resources to accomplish the shared vision Build commitment among the group	The desire to be **open** to others by listening and reflecting on their ideas and responses The ability to **create** a supportive communicative climate The willingness to accept **responsibility** for engaging and incorporating the ideas of group members to develop a shared vision for the project

* Some elements of our theoretical foundation are adaptations of Vetter and Nunes's course design.

Experiential Learning and Reflection Thread

In addition to our competency threads, we also integrated a pedagogical model that provides students opportunities to practice these competencies in multiple contexts and situations. These writing situations incorporate elements researchers have associated with successful transfer—active experimentation and reflection—through the interplay between theoretical knowledge and the demands of realistic and complex situations. By combining explicit competencies with an experience-and-reflection focused pedagogy, we better prepare students to transfer knowledge and skills between classrooms and workplaces.

We used David Kolb's model to create a pedagogy that asks students to recursively conceptualize, apply and practice, and reflect on their knowledge, skills, and writing experiences. Our threaded-competency pedagogy focuses on what Kolb describes as "grasping" and "transforming" experience through intentional and thoughtful practice and reflection. The Kolb learning model gave us a common pedagogical process for helping students develop and apply our agreed upon competencies both in and outside of our classrooms through four different activities (as shown in Figure 1) that encourage successful learning and transfer: experience, reflective observation, abstract conceptualization, and active experimentation (30). Central to the Kolb model is the learner's ability to connect abstract theoretical knowledge (in our case professional competencies) to concrete experiences through observation and reflection and to experiment with that knowledge in a range of situations. Learning occurs through a recursive process of applying knowledge and conceptual understanding to real-world problems and using real-world experience to modify conceptual knowledge. Kolb's definition of learning as "the process whereby knowledge is created through the transformation of experience" expresses our vision of students learning as they participate in a series of conceptually unified but increasingly complex and risky writing tasks (38).

This focus on sequenced experiential learning moves away from our earlier transmittal model of learning, where students learned ideas in the IPW classroom using traditional classroom assignments before moving to the internship experience in the APW course. Our new threaded curriculum emphasizes practicing competencies through experiential activity in both courses, helping students see a connection between the assignments in the introductory writing course and the more advanced internship course. Our pedagogical design recursively moves students between learning writing concepts, practicing writing tasks, and reflecting on their writing experiences. The recursive nature of the pedagogy helps students contextualize, decontextualize, and recontextualize their knowledge and skills to see their applicability to new situations, a process Perkins and Salomon call "high road transfer" (22). Research shows that students are more likely to transfer their knowledge when instruction connects skills to theoretical concepts, when teachers and students explore how those concepts and skills are relevant (or not) across different situations, when students have opportunities to apply concepts and skills in multiple and contrasting contexts, and when students monitor and reflect on their own learning experiences (National; Engle, et al.).

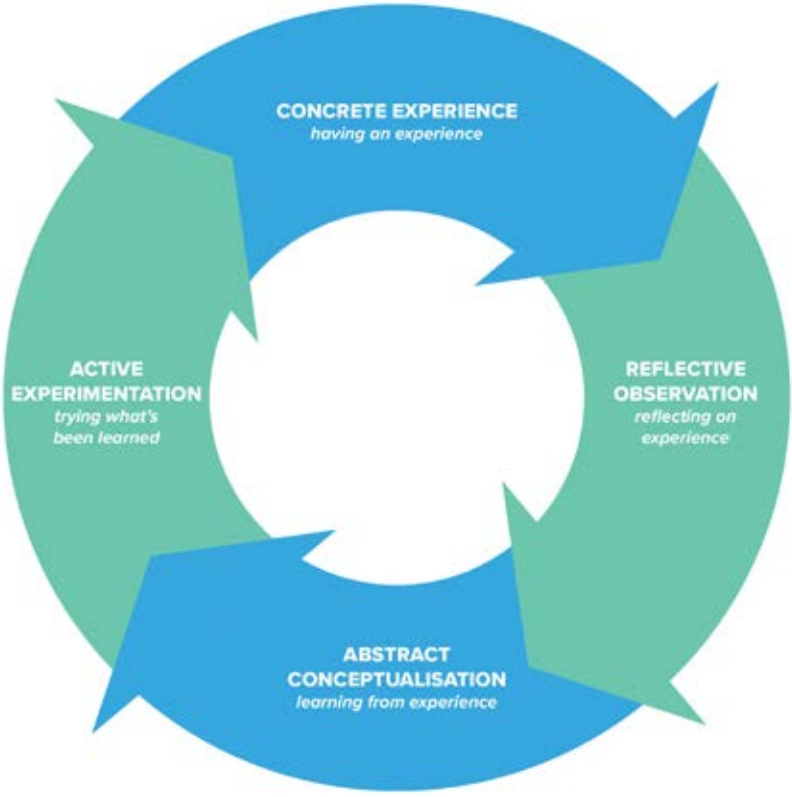

Figure 1. Kolb's Experiential Learning Model

Active experimentation gives students multiple opportunities to apply and test competencies they develop in our courses. There are three primary benefits to active experimentation: (1) students begin to refine the abstract ideas they formulated during the conceptualization stage of learning; (2) students strengthen their ability to think in abstract terms about experiences; and (3) students intentionally practice competencies.

Sequencing Writing Courses

Both the introductory professional writing course (IPW) and the advanced professional writing internship course (APW) are part of a minor in professional writing and rhetoric housed in the English department of the large private university in which we teach. The minor introduces students to rhetorical history, theory, and criticism as a foundation for composing effective texts in a wide variety of contexts

and genres. Students are required to take a fundamentals of rhetoric class, a writing style class, and four other courses chosen from history and study of rhetoric, visual rhetoric, digital communication, or professional writing. As instructors, we saw that our students often failed to appreciate the theoretical ties that bind our minor's foundational classes to the professional writing courses. While students found rhetorical theory and history interesting, we needed to help them see how those ideas integrated up the curriculum. This problem, combined with our students' lack of confidence when entering the internship course, motivated us to redesign the IPW and APW around a threaded-competency model.

We believe teachers of threaded courses should spend time early in the semester helping students understand this unique approach to teaching and learning. Teachers should explain how the course readings, assignments, and activities represent a pedagogical process for acquiring the competencies. In our courses, we combine this initial introduction to competencies with reflection—asking students to write about their learning goals for the semester and more specifically their long-range writing goals. In this initial reflection, students imagine what their learning experiences (both in and outside the classroom) will look like, how their learning will prepare them for a profession that includes writing, and what they might do to prepare for the upcoming assignments. We also ask students to detail any previous learning, writing challenges, and writing opportunities that spurred their decision to take our courses. We explain that this initial reflection performs the forward and backward moves we will encourage throughout the semester (Taczak and Robertson). We want to learn about ways our students' preparation might enhance their experience in the courses and their hopes for the future. Equally importantly, we use this first writing assignment to introduce students to reflective discovery and the idea of linking past, present, and future learning.

Threaded-competency courses are inherently theory classes, and teachers may ask students to demonstrate understanding of theory through typical textual assignments. For example, because we teach theories of genre, our IPW students use these theories to write a genre analysis paper of a professional writing genre they choose—a fairly routine assignment in a writing class. However, a threaded-competency curriculum will purposely design each assignment with experiential learning in mind. As a result, even these more traditional assignments ask students to experiment with abstract knowledge by applying it to concrete situations and then to reflect on their learning. We next ask students to use and test what they learned from this assignment on the next assignment. So, for example, after writing the genre analysis paper, IPW students write a style guide document for the genre and then use a classmate's style guide to create a text in an unfamiliar genre.

This interplay between theoretical and experiential learning is the foundation of a threaded-competency course. While the experiential component will look different for every course, we share the following examples of experiential activities we have used to help teachers imagine activities appropriate to their own courses. In our IPW course, students experiment with and apply competencies by completing both traditional case studies and an open-case study in which they interact with an on-campus "client" (as described below). When they move to the APW course, practicing competency threads entails increased complexity and increased risk because students must complete a ten-hour per week professional writing internship. Still, students in both IPW and APW approach their learning in a back-and-forth process, moving recursively between class discussions, open-case studies, and internship experiences.

Following the Kolb cycle, we design readings and assignments that are relevant to students' concrete work experiences, which we use to illuminate and push students' understanding of the readings and in-class assignments. Every new experience requires students to evaluate how the situation is like and not like previous situations and to decide how theories and concepts apply or don't apply (Reiff and Bawarshi). This dialectic process helps students examine and refine their assumptions about the competencies. The semester-long APW internship gives students sustained engagement with professional writing tasks, allowing them to draw on earlier experiences in IPW and to transfer those experiences to more difficult client projects and more challenging team dynamics. Moving to higher-stakes tasks often forces students to critically question the theories they have learned and their assumptions about how communication works.

Below we describe extended examples of two elements of our threaded, competency-based approach to writing instruction. We selected two competencies we felt best exemplified the threaded approach, genre and leadership (see chart above). We offer this granular detail to illustrate the recursive nature of the threaded-competency curriculum and pedagogy. As we have taught our threaded-competency classes, we have discovered that this kind of curriculum can sometimes feel like messy pedagogy. It does not support neat, discrete instructional units that are completed in an orderly sequence. Nor does a threaded-competency approach provide clear signposts of when content has been "mastered"; instead, it signals the continual development and refinement of overlapping knowledge, skills, and dispositions. Rather than a model to follow, we hope the description below helps teachers in all WAC settings invent threaded-competency curricula that make sense for their courses.

Threading Genre Competency

Our courses introduce students to social action and rhetorical theories of genre that see genres as stabilized (for now) responses to recurring social situations. Students

explore the idea that genres both respond to situations in ways that people deem successful and in turn shape those social situations. They learn to think of genre not just as formal features but as "the keys to understanding how to participate in the actions of a community" (Miller 85).

In IPW students apply those theories to contemporary professional writing situations and texts using a traditional case study format, but cases are culled from current events rather than textbooks. Students use the theory to identify and describe a recurring social situation, to evaluate the effectiveness of a genre's conventions in responding to the situation, to describe action the genre is trying to accomplish, and to imagine how the genre and the social situation might shift and shape each other. For example, during fall of 2018 when Tesla CEO Elon Musk was in the news for tweeting about taking his company public and smoking what appeared to be marijuana on television, students analyzed the company's press releases and blog posts using theories of the rhetorical situation (Bitzer, Vatz, Consigny) and genre (Miller, Devitt) to understand the company's response. During that same semester, students also analyzed statements from the Women's Tennis Association and United States Tennis Association that were posted on the organizations' Twitter accounts and websites in the wake of the dramatic US Open final between Naomi Osaka and Serena Williams. In fall 2019, students analyzed Boeing's professional writing in the aftermath of two 737 Max crashes, the grounding of all 737 Max planes, and Boeing CEO Dennis Muilenburg's testimony to Congress. Students analyzed how Boeing's professional writers used the genres of tweets, blogs, press releases, statements, and websites to shape fitting rhetorical responses to unfolding events. They evaluated those responses in terms of the action they accomplished and questioned whether the genre theories they learned adequately explained these examples of professional writing. They also created alternative responses, which in some cases imaginatively tested a genre's flexibility.

We believe that using current events as case studies allows students to experience theory (and appreciate its kairos) in a way that using textbook case studies does not. Our experience has shown that using current events makes students more eager to engage theory and more motivated to consider how theory helps them understand the world around them and their own lived experiences. Students sometimes feel compelled to correct or elaborate a theory that does not account for their interpretation of a situation. For example, students examining a letter to employees from Elon Musk that was posted on the company's website felt that the social action theories of genre we discussed in class didn't fully help them analyze a text that appeared to be written by Musk but that was likely written by someone else. The students' discomfort with the theory as an adequate explanation demonstrated that they were

developing a disposition of curiosity as they sought more nuanced ways of understanding writers, writing situations, tasks, and texts.

IPW students also participate in open-case studies, using professional writing situations on campus as the material for their practice and concrete experiences. An open-case study model lets students apply their learning to a context—the university campus—where they already have "significant knowledge of their rhetorical situation and their probable readers" (Johnson-Sheehan and Flood 24). Because the campus is an "indeterminate, evolving rhetorical situation which [is] essentially unpredictable" (24), the open case studies allow students to apply theoretical knowledge to more richly complex situations than traditional case studies. Students' open-case study projects have included analyzing the directory for our campus's student union building. Based on their analyses, students produced a "deliverable" for the "client"—an interactive map app for the union building. Other open-case studies have resulted in a redesigned financial aid website, a grant proposal guide for a student-led nonprofit agency affiliated with the business school, educational outreach materials for the dance department, marketing materials for a department minor, and a proposal for improving campus communication. As IPW students complete these open-case projects, they continue to apply, assess, and elaborate theory, while also practicing skills and dispositions.

The following semester in APW, students apply the same ideas about genre and rhetoric to create a "Needs Analysis" of their internship provider. The stakes for this assignment are higher than that of the IPW case studies because students meet with an actual supervisor and interpret the situational factors that influence what genres are most appropriate for addressing the company's content needs. Nevertheless, the students still use the rhetorical and genre theories (as well as skills and dispositions) they learned in IPW as they approach this new writing situation. After an initial meeting with the client, students draft an analysis of the rhetorical situation and genre and present that draft to the class for the others to critique. Each student presents their findings explaining both the organizational challenges they uncovered and their plan for addressing them. Teacher-led discussion helps the student reflect on their initial assumptions about the assessment, encouraging them to consider not only the stakeholder but the larger rhetorical situation and how that may impact their work at the company. The student and teacher feedback is designed to be constructive, but it can be directive at times, requiring the presenter to either defend a particular decision that may lack supporting evidence or to consider other possible workplace genres. These conversations between students and teacher require students to reflect on how well their knowledge of genre and rhetoric fits the new situation. In doing so, they often find that, as with the IPW case studies, their new experiences require them to reconceptualize abstract principles they have learned. The feedback

process also allows students to demonstrate dispositions of creativity and flexibility as they adjust not just to the rhetorical situation but also to their peers' and teacher's responses to their plans for using genre to accomplish their purposes.

Threading Leadership Competency

Jonathan Alexander articulates leadership in the writing classroom as a "trans-literacy," that is a literacy practice more easily transferred because students see connections to the professional world (45, 46). Given the broad range of leadership models, we believe defining leadership for composition should include forms relevant to co-authored documents. We therefore define leadership using three criteria drawn from the literature: building a shared vision for the writing project, aligning resources to accomplish that vision, and acquiring commitment from the group to achieve that vision (Northhouse). We tell students that writing in professional contexts may require different leadership skills, and leadership may include being the project lead, or it may require leading through example throughout the life cycle of their projects.

Helping student-led writing groups set a vision for their project is an important first step. Our students often find themselves working in unfamiliar situations and with unfamiliar genres. This process begins by encouraging students to foster an environment where a diversity of ideas can be heard and where different group members can contribute. As students make time for vision setting, they develop stronger group dynamics which improve their collaborative efforts. Leadership in this context may require much less talking than what students initially think. In truth, we have seen those who are strong active listeners often help the group find a shared vision. Students are surprised by how much influence they have on a project if they can simply listen intently to what other group members say and then articulate areas of consensus and/or disagreement.

Mumford describes the second criteria of leadership as "idea structuring," a term which refers to an ability to offer specific feedback and help establish goals—which might include setting timeframes and expectations (737). We believe idea structuring is an essential skill for student-led collaborative writing projects because students often struggle with how to translate their ideas into project outcomes and how to productively challenge ideas that may not fit the agreed vision of the project. Teaching Mumford's notion of leadership gives students agency to help shape group discussion and a strategy for evaluating ideas as they relate to the goals of the project.

In both IPW and APW, students build a shared vision of their group writing project and practice idea structuring as they engage in different client projects. Again, "client" refers to both on-campus organizations (IPW) and off-campus organizations (APW). In preparation for these client projects, both courses introduce students to forms of leadership in collaborative writing and different approaches to project

planning. After practicing using teamwork and project planning in addressing several case studies (including those mentioned above), IPW students turn to the on-campus client project, working in teams of three or four to complete a series of assignments that require them to link the conceptual knowledge they've gained through readings and case studies to the on-campus situation. Again, students use theories about rhetorical situations, genre, and discourse communities to understand the on-campus organization and its needs, the audience they will address, and the appropriate genre for their deliverable. But they also practice leadership as they collaboratively make every decision regarding choice of client, project design, process, and team roles. Students complete most assignments together: team contracts, research reports, proposals, final deliverables, and an oral presentation to a representative from the on-campus entity. Along the way, students individually compose progress memos and reflections on their learning, but the major work of the IPW client project is done collaboratively and invites students to practice idea structuring and setting a vision for the project.

The APW course allows students to continue to practice leadership competency in a complex, real-world situation. However, since the students have a formal relationship with an internship provider, the stakes are much higher. In the IPW class, students are essentially volunteering a service to the client, making them less accountable to the client than they are in an APW internship. In the APW course, students develop leadership competency in group-writing projects outside the classroom. For example, one APW student, assigned to a large data-software company, used Mumford's "establishing a shared vision" and "idea structuring" to propose and develop a new approach to proposal writing at the company. Sarah's internship placed her within a proposal writing team, and her particular role was to find better ways to train salespeople to be more self-sufficient proposal writers. While the proposal writing team mostly handled larger proposals, Sarah's internship focused on solving this particular workplace problem: help the sales team write their own proposals. Sarah reported feeling "overwhelmed the first few weeks," saying she didn't know much about business operations and complex software used by the different sales teams to coordinate their efforts. After some initial failures, she started to create a shared vision with her proposal writing team. In Sarah's words, she started to "feel like I was contributing to a definable solution."

After her initial needs analysis was complete, Sarah pitched an idea for a content library, a sort of copy-and-paste approach that sales people could use to create more informal proposals, proposals that would have the dual function of serving as scope documents for the client and company. The company was impressed with Sarah's vision for the project and integrated it into a larger content library where salespeople could go and copy and paste information requested in different requests for

proposals, a common workplace document. Because of her success with her internship project, Sarah was offered a full-time position on the proposal writing team to help the company realize her vision for the project.

A Word about Reflection

Our courses thread both experiential and reflective learning activities across all competencies. We believe these pedagogical elements are essential for giving students opportunities to apply and test the competencies they develop in our courses. We see three primary benefits of active experimentation: (1) students strengthen their ability to think in abstract terms about their experiences and the skills those experiences demand; (2) students evaluate and refine the abstract ideas that are the foundation of each competency; (3) students intentionally practice competencies as a combination of knowledge, skill, and disposition. But we believe reflection is an equally essential component of our learning model because it helps students articulate connections between abstract concepts, the core professional competencies, and the particularities of the different contexts where they are practicing the competencies. We use reflective writing assignments, student conferences, and class discussions in both IPW and APW to ask students to reflect on their learning and experiences. We have found that student-led discussions in class, what we called "free discussions," are an especially productive means of reflection. These discussions allow students in both courses to explore problems with difficult clients or project management issues in a non-directive mode. The emphasis on non-directive student-led discussions allows us as teachers to move among the students, listening and observing the conceptualization process at work. Our students frequently express feelings of unbalance and disorientation associated with abstract conceptualization, but even these feelings can become rewarding learning opportunities when students engage in productive dialogue about how the theories they've learned help them make sense of problems in the coursework and the world beyond the classroom.

Because reflection in our classrooms is an iterative process and is always connected to both conceptual and experiential learning, it resembles Yancey's idea of "constructive reflection." It asks students to reflect cumulatively, not just about the many individual texts they write in both classes, but more importantly about the trajectory of their conceptual knowledge, their emerging skills, and their developing dispositions—in short, about the kind of writer they are becoming. As students draw on professional writing theories from class, they also begin to form their own ideas about professional writing and themselves as future professional writers.

We found that our experiential-reflective pedagogy accommodates a wide range of learners. The immersive, experiential portions of our courses seem to appeal to students who value concrete experience and active experimentation, while the in-class

reflections and discussions appeal to students who are more comfortable with contemplation, observation, and abstract conceptualization. Additionally, the areas that students find less immediately comfortable or appealing provide opportunities for us as teachers to encourage and support their learning.

Concluding Thoughts: Transfer and the Threaded-Competency Curriculum

Our goal in the threaded-competency curriculum aims to help students use their theoretical knowledge, concrete experience, and reflective observations to become nimble and effective writers in any context. However, transfer is often difficult for students because it requires them to adapt recently acquired conceptual knowledge to new writing situations, which may challenge that knowledge. Spread over two semesters and encompassing a range of progressively more challenging situations, the threaded-competency curriculum provides students repeated opportunities to practice and reflect on their ability to transfer knowledge, skills, and dispositions. A threaded-competency curriculum means that we make competencies explicit and that we stay with them longer, giving students varied opportunities to practice and apply their learning to contexts with different levels of risk and reward. The low-stakes assignments of IPW, often ungraded and completed collaboratively in class, allow students to comfortably practice the competencies in preparation for the more unpredictable on-campus client project. In turn, the APW course's needs analysis assignment for a corporate client presents elevated risk and increased accountability, but it requires the same conceptual knowledge, skills, and dispositions learned in IPW.

Many times our students in the IPW and APW courses grasp theoretical ideas and see the value of the applied writing experiences, but they struggle to make the connection between the two. We've recognized that these struggles represent significant learning opportunities if students are given the time and opportunity for practice and reflection. The threaded-competency curricular approach embraces abstract conceptualization and active experimentation and provides repeated opportunities for students to practice, apply, and reflect on their learning experiences—including the disorientation that is an inevitable part of any experiential learning process. By requiring students to use competencies—knowledge, skills, and dispositions—to make sense of new experiences in and outside our classrooms, we help students build deeper connections to a broader system of knowledge about both professional writing and learning in general. Kolb describes this as transforming "observations into logically sound theories" (30). Our threaded-competency curriculum encourages a different style of learning than our previous courses did. In our new courses, curiosity is encouraged and frustration is expected as experiences fit (or don't fit) existing forms

of knowledge. Rather than coming to a tidy conclusion, our threaded-competency courses help students see their learning as an ongoing process that extends beyond the end of a semester or the obtaining of a degree. By threading competencies and experiential learning through our courses, we wanted students to more consciously recognize the connections within each class, between our two-course sequence, and between their classroom experience and current and future experiences outside of the university. We believe that the design of our courses not only supports transfer but provides students with a model of how they might continuously engage in transferring competencies—knowledge, skills, and dispositions—to new contexts. Threading our professional writing courses with competencies and experiential-reflective learning activities gives students a framework for self-directed lifelong learning.

In that regard, the experience of creating these courses forced us as teachers and scholars to engage in the same process of transfer that we imagine for our students. We spent several months working collaboratively to formulate and articulate competencies as concepts, skills, and dispositions and to find a pedagogical approach that felt coherent for both of our courses and the workplace situations we envision our students entering. That process required us to draw on abstract concepts we had learned about teaching and learning, to apply them to the curricula we were developing, and often to reconceptualize our prior understanding to fit our new experiences and address our new goals. It also required us to strengthen (and in some cases develop) dispositions of flexibility, openness, and responsibility that our academic work does not always require. Thus, creating this threaded-competency curriculum engaged us in a learning process much like that we hope our students will experience as they take our courses. We can attest both to its moments of disorientation and frustration and to its potential to promote deep learning.

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