

# Annotated Bibliography

Anson, C. M., & Forsberg, L. L. (1990). Moving beyond the academic community: Transitional stages in professional writing. *Written Communication*, 7(2), 200–231.

Drawing on interviews with six university seniors placed in internships, Anson and Forsberg study the “social and intellectual adaptations” (p. 201) of students moving from school to work by identifying three stages of successful transition into a workplace culture: *expectation* (students entered their internships confident that they would be able to successfully draw on previous writing experiences and strategies), *disorientation* (interns tended to feel isolated and overwhelmed), and *transition and resolution* (interns “finally integrat[ed] experience and reflec[t]ed on the intellectual changes afforded by writing in the new context” p. 208).

Anson, C. M., & Moore, J. L. (Eds.). (2016). *Critical transitions: Writing and the question of transfer*. WAC Clearinghouse.

An edited volume representing scholarship produced by participants in Elon University’s Seminar on Critical Transitions (2011-2013). See also Moore and Bass’s edited collection, *Understanding Writing Transfer: Implications for Transformative Student Learning in Higher Education*, published by Stylus Press (2017). In keeping with the goals of the Elon Seminars, much of the research in both volumes is multi-institutional.

Baldwin, T. T., & Ford, J. K. (1988). Transfer of training: A review and directions for future research. *Personnel Psychology*, 41(1), 63–105.

A seminal literature review that established the taxonomy of trainee characteristics, training design, and work environment that dominated decades of subsequent research for human resources scholars studying transfer of training.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215.

The article in which Bandura develops the construct of self-efficacy. Helpfully read in tandem with his book, *Social foundations of thought and action* (1986), which develops his social cognitive theory.

Beaufort, A. (2007). *College writing and beyond: A new framework for university writing instruction*. Utah State University Press.

Beaufort's longitudinal case study of Tim, a college student writing in first-year composition, history, and engineering courses, and eventually at work, tracks his struggles transferring writing knowledge across these contexts. The book argues that Tim's struggles are the result of never being explicitly taught the knowledge that supports writing success. Beaufort's contribution is a clear articulation of what that knowledge is: discourse community knowledge, genre knowledge, rhetorical knowledge, subject matter knowledge, and writing process knowledge. This framework of overlapping knowledge domains was previously developed in her ethnography *Writing in the Real World* (1999).

Berman, R. (1994). Learners' transfer of writing skills between languages. *TESL Canada Journal*, 12(1), 29–46.

Berman's study of 126 secondary EFL students in Iceland was one of the first studies in L2 writing to explicitly focus on language transfer by examining how essay organization skills were transferred from English to Icelandic. Grouping three instructional approaches—L1 essay instruction, L2 (English) instruction, no instruction—he looked for difference in pre- and post-intervention organization and grammatical proficiency scores. Berman concluded that students did trans-

fer organization skills between Icelandic and English, showing that the groups with instruction improved regardless of language of instruction, and highlighting that instruction on a particular skill was a more powerful enabler of transfer than was language or grammatical proficiency in that language.

Bromley, P., Northway, K., & Schonberg, E. (2016). Transfer and dispositions in writing centers: A cross-institutional mixed-methods study. *Across the Disciplines*, 13(1), 1–15.

Bromley, Northway, and Schonberg traced the transfer of student writing knowledge by examining how student visitors to three writing centers at different institutions describe the writing knowledge that transferred during and after sessions. The researchers collected students' self-reported perceptions that writing center visits increased their confidence and their meta-awareness through reported acts of writing transfer. Guided by a theoretical framework that incorporated Yancey, Robertson, and Taczak's (2014) connection of Wardle's (2012) problem-exploring dispositions to Reiff and Bawarshi's (2011) boundary crossers and Perkins and Salmon's (2012) high-road transfer, they examined writing centers' ability to provide low-stakes contexts to explore and expand problems. Their survey and focus group data from three campuses allowed for a cross-institutional analysis of student transfer, showing most student visitors engaging in transfer, with a "large majority" engaging in far transfer. Their inclusion of focus group quotes shows students' perceptions of how their next steps in an assignment were guided by what they learned in a session as well as the writing "breakthroughs" they experienced in sessions and continued to call on in later contexts.

Bruffee, K. A. (2008). What being a writing peer tutor can do for you. *Writing Center Journal*, 28(2), 5–10.

Bruffee describes the personally enriching experience of being a peer writing tutor. Because peer tutoring shows tutors and tutees that no one writes alone, that "writing is a form of civil exchange that thoughtful people engage in when they try to live reasonable lives with one another" (p. 8), Bruffee argues that tutoring writing is definitively human, allowing tutors to practice a "helping, care-taking engagement"

(p. 6) that tutors take with them to other areas of their life. He names this engagement an “interdependence” (p. 8) that tutors practice, model, hand off to tutees, and then carry around to other communicative engagements.

Carter, M. (2007). Ways of knowing, doing, and writing in the disciplines. *College Composition and Communication*, 58(3), 385–418.

This essay describes a project in which departmental faculty worked together to identify their disciplines’ “ways of doing” that revealed the “ways of knowing and writing” that they valued in turn. Although Carter’s ultimate goal is to forward a structure in which “metagenres” and “metadisciplines” help WID professionals guide faculty development in teaching with writing, his description of departmental conversations around writing values reveals implicit assumptions about how writing knowledge accumulates via transfer as students move through a major. Metagenres are the patterned doing within these, genres of genres or general “ways of doing” that pattern into “similar *kinds* of typified responses to related recurrent situations” (p. 393). He names four: (a) responses to academic situations that call for problem solving (plans, reports, proposals); (b) responses to academic situations that call for empirical inquiry; (c) responses to academic situations that call for research from sources; and (d) responses to academic situations that call for performance. Importantly, Carter says all of these highlight the relationships among disciplines, thus smoothing the path for transfer to occur.

Colquitt, J. A., LePine, J. A. and Noe, R. A. (2000). Toward an integrative theory of training motivation: A meta-analytic path analysis of 20 years of research. *Journal of Applied Psychology*, 85(5), 678–707.

A meta-analysis of 106 studies related to training motivation, this article is particularly helpful for the way it works to define and clarify the relationships between motivation, other individual characteristics (such as self-efficacy, locus of control, and anxiety), and transfer.

Courage, R. (1993). The interaction of public and private literacies. *College Composition and Communication*, 44(4), 484–496.

Courage links out-of-school writing and academic discourse by situating his inquiry within writing studies conversations of the 1980s and 90s that wondered if these two types of literacies could be compatible at all (Bartholomae, 1986; Bizzell, 1982). To address these concerns, Courage (1993) turns to Literacy Studies/New Literacy Studies for how it connects in- and out-of-school writing by evoking the concept of multiple literacies/multiliteracies, which explore how “sociocultural logic of [literacy] patterns, and the complex relations among them” (p. 490) help or hinder home-to-school transfer of writing-related knowledge. In his study of adult-aged college students, Jannette and Ethel, Courage untangles some of the range of how patterned literacy experiences, attitudes towards writing, and senses of identity interact with school and teacher expectations.

DePalma, M. J., & Ringer, J. M. (2011). Toward a theory of adaptive transfer: Expanding disciplinary discussions of “transfer” in second-language writing and composition studies. *Journal of Second Language Writing*, 20(2), 134–147.

DePalma and Ringer synthesize L2 writers’ rhetorical practices, curricular conditions, genre activity, and identity concerns into a complex theoretical framework they call adaptive transfer. DePalma and Ringer aimed to better account for writers’ agency in reshaping or reforming of prior writing knowledge as they encounter new contexts, proposing a “conscious or intuitive process of applying or reshaping learned writing knowledge in order to help students negotiate new and potentially unfamiliar writing situations” (p. 135). They relied on studies from writing studies and education, like Matsuda’s (1997) dynamic model and Wenger’s (1998) concept of brokering, as a theoretical base from which to move beyond transfer as reuse or reinterpretation of static knowledge. In their formulation, adaptive transfer moves beyond students’ application of prior knowledge to the adaptation of writing knowledge in dynamic, idiosyncratic, cross-contextual, rhetorical, multilingual, and transformative ways (p. 141).

Detterman, D. K., & Sternberg, R. J. (1993). *Transfer on trial: Intelligence, cognition, and instruction*. Ablex.

In this edited collection, Detterman, Sternberg, and other authors offer a range of critiques of current cognitive approaches to understanding transfer. Detterman's opening chapter takes a cognitive approach, critiquing several landmark studies (including Thorndike, Judd, and Gick and Holyoak) arguing that transfer which must be cued should not be considered transfer. Another chapter by Greeno, Moore, and Smith offers a situated learning critique (and is summarized below).

Devet, B. (2015). The writing center and transfer of learning: A primer for directors. *Writing Center Journal*, 35(1), 119–151.

Devet's primer on transfer for writing center directors states that a more intentional focus on transfer could reveal much about what is accomplished in writing centers. She suggests that deliberately teaching tutors transfer concepts from educational psychology (near and far, lateral and vertical, conditional and relational, declarative and procedural) and from composition (prior knowledge, dispositions, context, genre) could help tutors become more strategic in their practice, better naming what happened in a session or more thoughtfully anticipating a session to come.

Dias, P., Freedman, A., Medway, P., & Paré, A. (1999). *Worlds apart: Acting and writing in academic and workplace contexts*. L. Erlbaum Associates.

A collection of essays generated by four coordinated-yet-distinct research projects undertaken by the authors. They examined writing in four professions—public administration, management, architecture, and social work—simultaneously in school and at work. Through these comparisons, the authors conclude that there is “a radical difference” between school and work (p. 199), that they are, as the title suggests, worlds apart. This collection is heavily influenced by rhetorical genre theory and theories of apprenticeship and distributed cognition.

Dias, P., & Paré, A. (2000). *Transitions: Writing in academic and work-place settings*. Hampton Press.

An edited collection from many of the same researchers involved in *Worlds Apart* (1999). This volume also includes related work by authors similarly informed by rhetorical genre theory and situated learning, focused on engineering (Artemeva), a pharmaceutical company (Ledwell-Brown), and the Bank of Canada (Smart).

Driscoll, D. L. (2015). Building connections and transferring knowledge: The benefits of a peer tutoring course beyond the writing center. *The Writing Center Journal*, 35(1), 153–181.

Driscoll describes a tutor education course that uses transfer pedagogy to teach writing center and writing studies content. Driscoll designed a course that focused on the “knowledge applications” component of a general education requirement, which asked students “to take a course from outside their major and apply that knowledge to their major” (p. 159). To support this knowledge transfer, Driscoll designed the course around Bransford and Schwartz’s (1999) preparation for future learning, which emphasizes not specific knowledge or tasks but on forward-looking concepts like adaptability or resource use, and Perkins and Salomon’s (2012) “detect-elect-connect” model (p. 158).

Driscoll, D. L., & Wells, J. (2012). Beyond knowledge and skills: Writing transfer and the role of student dispositions. *Composition Forum*, 26(Fall). Retrieved from <http://compositionforum.com/issue/26/beyond-knowledge-skills.php>

One of the earliest examples in writing studies to highlight the importance of dispositions for transfer of learning. (Wardle, 2016, also does so in the same special issue.) Driscoll and Wells highlight four dispositions discussed at length in the chapter on industrial psychology—value, self-efficacy, attribution, and self-regulation—and illustrate the analytical power of dispositions with examples from their distinct research projects. Driscoll has further developed arguments around dispositions and transfer in Driscoll et al. (2017); Driscoll & Jin (2018); Driscoll and Powell (2016); and Gorzelsky et al. (2016).

Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological review*, 95(2), 256–273.

In this article that predates the best-selling book *Mindsets*, Dweck develops her theory of goal orientation—an individual characteristic which is distinct from the pedagogical intervention of goal setting. She distinguishes between mastery-oriented goals and performance-oriented goals; subsequent research has argued that performance-goal orientation is less conducive for learning and therefore for transfer of training.

Freedman, A., Adam, C., & Smart, G. (1994). Wearing suits to class simulating genres and simulations as genre. *Written Communication*, 11(2), 193–226.

An investigation of an in-class workplace simulation in a financial analysis course. Through analysis of a rich data set (including interviews, texts, classroom observations, and more), the authors conclude that although the instructor and students invest considerable energy in building the fiction of the workplace, students “were never deceived” (p. 204) about the fact that they were doing school for a grade—a reality that influenced both their written and spoken discourse, keeping it at a significant remove from the goals and practices of an actual workplace.

Gick, M. L., & Holyoak, K. J. (1980). Analogical problem solving. *Cognitive Psychology*, 12(3), 306–355.

In a pair of articles—this publication and “Schema induction and analogical transfer” published in the same journal in 1983—Gick and Holyoak share the results of eleven distinct but related examinations of how the problem-solving strategies of individuals might be influenced by their earlier exposure to similar problems—including the oft-cited “radiation problem.” An early and widely cited example of the cognitive approach to understanding transfer of learning.



Gist M.E., Schwoerer C, & Rosen, B. (1989). Effects of alternative training methods on self-efficacy and performance in computer software training. *Journal of Applied Psychology*, 74(6), 884–891.

The first in a series of articles Gist published with colleagues (see also Gist et al., 1990; Gist et al., 1991; Stevens & Gist, 1997) that focus on the relationship between self-efficacy and transfer of training as mediated by instructional design differences, such as goal setting and self-management.

Greeno, J. G., Moore, J. L, & Smith, D. R. (1993). Transfer of situated learning. In D.K. Detterman & R.J. Sternberg (Eds.), *Transfer on trial: Intelligence, cognition, and instruction*, (pp. 99–167). Ablex Publishing.

In this chapter, the authors offer a critique of current cognitive approaches to understanding transfer, arguing that cognition is situated and that a robust understanding of transfer must take into account the affordances and constraints offered by the various contexts through which individuals move.

Holton, I. E., Bates, R. A., & Ruona, W. E. A. (2000). Development of a generalized Learning Transfer System Inventory. *Human Resource Development Quarterly*, 11(4), 333–360.

Holton and colleagues explain the development and validation of their Learning Transfer System Inventory (LSTI), a survey instrument of 68 questions meant to help standardize research. More information on its development can be found in Holton et al. (1997); more information on its use in international contexts can be found in Bates et al. (2007), Chen et al. (2005), Devos et al. (2007), Khasawneh et al. (2006), Kirwan & Birchall (2006), Velada et al. (2009), Yamkovenko et al. (2007), and Yamnil (2001).

Hughes, B., Gillespie, P., & Kail, H. (2010). What they take with them: Findings from the Peer Writing Tutor Alumni Research Project. *Writing Center Journal*, 30(2), 12–46.

Setting out to understand “what peer tutors take with them” after leaving college, Hughes et al. describe the Peer Writing Tutor Alumni

Project (PWTARP), for which they conducted a large-scale electronic survey of 126 tutor alumni from their three institutions. The survey collected thoughts from alumni who tutored as far back as 1982, gathering a lifespan perspective on the impact of tutoring writing. By relying on the construct “take with them,” the survey assumes the presence of knowledge transfer, but moves beyond writing knowledge. Following Bruffee’s (1978) notion that tutors practice the kinds of socially-situated communication skills that will serve them in work, family, and civic contexts long after college as well as constructs from William Cronon’s 1998 essay “Only Connect,” their analysis of participant reflections highlights not only tutors’ learned writing knowledge but the kind of learning Cronon characterizes as a liberal education: they “listen and they hear”; “they read and they understand”; “they can talk with anyone”; “they can write clearly and persuasively and movingly”; “they practice humility, tolerance, and self-criticism”; and “they nurture and empower the people around them” (pp. 76–78). Hughes et al.’s findings show these traits in tutor alumni, with implications for how tutors transfer intellectual, professional, social, and personal knowledge into other areas of their lives.

Hutchins, E. (1995). *Cognition in the wild*. MIT Press.

A “cognitive ethnography” of navigation aboard a US Navy ship, this book is one of the earliest and most often cited analyses of distributed cognition. Hutchins argues that both the navigational tools and the teams of individuals aboard the vessel are sites of distributed cognition. Particularly useful in the field of knowledge management, which focuses on transfer of knowledge among individuals via mediational tools.

James, M. A. (2008). The influence of perceptions of task similarity/difference on learning transfer in second language writing. *Written Communication*, 25(1), 76–103.

Based on findings from his 2006 study that found writing knowledge transfer was partly influenced by the similarity and difference between subject matter that students wrote about in their ESL and other courses, James’ article seeks to further understand how both subject matter and task similarity/difference influence the transfer of writing

skills. Like Leki and Carson's early research (1994), his research sought to understand how students' perceptions of task similarity affect the transfer of writing knowledge between first-year ESL writing courses and "tasks outside the classroom" (p. 76). Asking 42 students to complete an out-of-class writing task and subsequent reflective interview and scoring both that task and a class writing assignment, James found (a) that learning transfer did occur between the class writing assignment and out-of-class task, but (b) that transfer was more frequently described and seemingly carried out (indicated by higher scores) when students perceived the writing tasks to be of similar difficulty levels (p. 92). Because James found that actual task difference had less of an impact on transfer than students' understanding of that difference, he concludes that perception of writing task difference is more important than actual difference when supporting transfer of writing skills.

Kobayashi, H., & Rinnert, C. (2008). Task response and text construction across L1 and L2 writing. *Journal of Second Language Writing, 17*(1), 7–29.

Kobayashi and Rinnert investigated the transfer of four types of writing instruction—intensive writing in L1 and L2; intensive writing only in L1; intensive writing only in L2; none in either language—on 28 Japanese students' L1 (Japanese) and L2 (English) exam writing strategies, especially in organizational use of structure and discursive markers. The research subjects were novice EFL writers with no prior college L2 writing instruction. Using textual analysis and post-essay student interviews, they conclude that training did affect how students approached their exam writing, but in slightly different ways: L1 essay-level writing practice did transfer to their L2 essays, but L2 (English) writing practice, which focused on the paragraph level, did not transfer back to students' L1 writing (p. 19). In other words, as students constructed texts in either language, transfer "occurred in both directions," with student interviews showing that students called on both of their languages as sources of knowledge about organization and discursive norms. Thus, Kobayashi and Rinnert reinforced Berman's (1994) finding that explicit instruction affects the transfer of writing knowledge but extended his findings to show both that L1 writing instruction supports writing choices in the L1 and L2 and particularly a meta-awareness of making those choices, and that in-

struction that stresses the interaction of an L1 and L2 in writing “led to greater effects” in students’ writing than the training that focused on the languages alone or separately, “perhaps because of the greater confidence it generated for both L1 and L2 writing” (p. 20).

Kubota, R. (1998). An investigation of L1–L2 transfer in writing among Japanese university students: Implications for contrastive rhetoric. *Journal of Second Language Writing*, 7(1), 69–100.

Kubota’s 1998 study of the negative and positive transfer of rhetorical style between Japanese and English was premised on the possibility of negative transfer or interference from students’ L1, Japanese—but its findings moved away from generalizations about homogeneous languages or cultures and toward the decisions of individual writers. Kubota researched the expository and persuasive writing of 46 Japanese college students who had studied English for at least 8 years in Japan to understand how an L1 and L2 interact in the composing process. Her study’s results revealed the nuance of L1 to L2 transfer of writing ability: students who had more experience writing in their L2 produced higher quality essays than students who had more L2 English education. Kubota suggests this is because English language education focuses on isolated sentence-level concerns and translation which affected the control over vocabulary and syntax in the L2 essays. Thus, she concludes that ESL writing organization that teachers and researchers puzzle over may be less a phenomenon of negative L1 transfer and more a factor of little experience with academic L1 writing (p. 88).

Lave, J. (1988). *Cognition in practice: Mind, mathematics and culture in everyday life*. Cambridge University Press.

Lave begins this volume—which predates her subsequent work with Wenger on communities of practice—with a thorough critique of previous cognitive approaches to understanding transfer. Drawing on her work with the Adult Mathematics Project, which followed individuals out of labs and mathematics classrooms and into contexts like grocery stores and weight-loss programs, Lave argues that people’s mathematical problem-solving strategies are strongly influenced by context. Through this work, Lave was an early articulator of the theory of situated learning.

Light, R., & Fawns, R. (2003). Knowing the game: Integrating speech and action in games teaching through TGfU. *Quest*, 55(2), 161–176.

Taking up the turn in sports education toward teaching games for understanding, Light and Fawns argue for a more comprehensive theoretical basis that unites teaching for physical skills with cognitive and embodied aspects of learning. As they assert, “we cannot separate the thoughtful activity that has previously been attributed to some inner realm of the mind from the social and material context in which activities or games take place” (p. 172). Moreover, to fully learn the tactical as well as the technical skills of a game, they further challenge the Cartesian split to “argue that the body is not a vessel steered by the mind, but rather that thought expresses itself in and through the body” (p. 173). Ultimately, they challenge the older, behaviorist models for sports education that focused primarily on teaching motor skills to argue that games are a “social-psychological” (p. 174) phenomena.

Lindenman, H. (2015) Inventing metagenres: How four college seniors connect writing across domains. *Composition Forum*, 31(Spring), <http://compositionforum.com/issue/31/inventing-metagenres.php>

Arguing that writing research often sets up domain categories—home, school, work, etc.—that miss how students forge their own generic connections, Lindenman’s study uses discourse-based interviews to elicit students’ own understandings of genre relationships, regardless of domain. She collects data through student surveys (n=319), four focus groups, and ten interviews to understand less how students transfer their writing knowledge across domains (her original research question) and more on how students draw on prior knowledge, using intuited relationships among genres, to “figure out” how to compose texts. She finds eight of ten focal participants linking their texts in unconventional ways, creating “metageneric connections” based on texts’ purposes, strategies, or rhetorical effect; rather than relying on texts’ learning contexts like first-year or disciplinary writing courses, students group their texts not by where they take place but by what they do.

Lobato, J. (2012). The actor-oriented transfer perspective and its contributions to educational research and practice. *Educational Psychologist, 47*(3), 232–247.

One of several articles in which Lobato explains what she has termed an “actor-oriented” perspective on transfer, a theory grounded in her research in mathematics classrooms. Researchers, Lobato notes, often use students’ ability to provide a correct solution to a previously encountered mathematical problem to gauge whether transfer has occurred; Lobato argues that if researchers attempt to understand students’ thinking as they attempt to solve the problems (e.g., through interviews), there is often evidence of transfer even when the final answers are incorrect.

Maran, N., & Glavin, R. (2003). Low-to high-fidelity simulation—a continuum of medical education? *Medical Education, 37*(s1), 22–28.

Maran and Glavin explain the meaning and value of simulations for medical education and synthesize the more recent uses of simulations in the teaching of medicine. They also emphasize the notion of fidelity in simulation construction and expand the dimensions of fidelity to match the range of context variables and competencies that a medical professional might need. Maran and Glavin concede that assessment in simulator training remains a challenge due to the ultimate unpredictability of working with human patients.

Melzer, D. (2014). The connected curriculum: Designing a vertical transfer writing curriculum. *The WAC Journal, 25*, 78-91.

With an eye to Gagne’s (1965) work on vertical curriculum, Melzer describes a reimagined vertical curriculum at UC Davis based in the transfer of writing knowledge. Melzer explains that a successful form of such a curriculum includes the following components: constant opportunity for student self-reflection and self-monitoring; writing practice over time and embedded in situated, domain-specific contexts; explicit teaching of academic writing threshold concepts like revision, genre, editing, introduced and reinforced across contexts and over time; the creation and reinforcement of a shared campus-wide vocabulary about

academic writing; and multiple opportunities for peer mentoring. He describes what these principles of a vertical transfer writing curriculum look like at UC Davis, including WAC workshops on supporting student reflection on writing and supporting growth of metacognition; a WAC-focused sophomore composition course that bridges to general education courses and a junior-level WID course that uses forward-reaching transfer strategies; and a shared campus meta-language about writing, reinforced through a university writing rubric, in the student writing handbook, in all course learning outcomes, and tutor training and outreach workshops in the writing center.

Middendorf, J. & Pace, D. (2004), Decoding the disciplines: A model for helping students learn disciplinary ways of thinking. *New Directions for Teaching and Learning*, 2004(98), 1–12.

Middendorf and Pace’s “Decoding the Disciplines” model aims to understand how to help students traverse “the gap between expert and novice thinking” in a discipline (<http://decodingthedisciplines.org/>). In the model, transfer is implicit in disciplinary thinking—those using the model assume that disciplinary learning happens over time and across contexts and thus pursue the role the transfer plays in students’ acquisition of disciplinary knowledge. Middendorf and Pace’s (1998) model delineates a “bottleneck approach” that seeks to understand where students experience difficulty in transferring knowledge—moving a concept from one side of a bottleneck to another. In a specific disciplinary context, this looks like faculty in history discussing what counts as teaching and learning in their discipline, using a bottleneck approach to identify where students get stuck in disciplinary learning (Pace, 2011). Such local, disciplinary conversations aim to “decode” unconscious processes into conscious communication about disciplinary knowledge so that concepts can be modeled for students and assessed, in this history case via a “letter” to a sibling about the course.

Moll, L.C., & N. Gonzalez (1994). Lessons from research with language minority children. *Journal of Reading Behavior*, 26(4), 439–56.

Moll and Gonzalez helped to develop the notion of funds of knowledge, which includes the historical and cultural experiences, knowledge, and skills that make up home and household life. The concept of

funds of knowledge helps educators learn how to bridge the knowledge of language minority and working-class students with mainstream, school-based curricula and literacy tasks. Actively viewing and actively developing relevant curriculum based on the vast, networked, and generationally-rich types of knowing—ranging from knowledge of plant cultivation to masonry to midwifery to biology and chemistry—of language minority and working-class students offers a transfer route that may be inaccessible through standardized schooling. Working from funds of knowledge means elevating households and the complex networks between households in communities as core sites of culture. It also means looking beyond what we would typically view as “literacies” to the broader sets of experiences that encompass and inform these children’s home worlds.

Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1), 14–37.

Drawing from experience with Japanese corporations as well as Polanyi’s theories of tacit and explicit knowledge, knowledge management scholar Nonaka develops a theory of knowledge creation and innovation. He emphasizes the ways in which, for innovative practices to be adopted by an organization, tacit knowledge must be made explicit, and explicit knowledge must then later be re-internalized.

Norman, G., Dore, K., & Grierson, L. (2012). The minimal relationship between simulation fidelity and transfer of learning. *Medical Education*, 46(7), 636–647.

The goal of this paper was to compare across a range of studies the effectiveness of high and low fidelity simulations in medical education. In their meta-analysis of 24 studies, they found little statistical difference between the effectiveness of high over low fidelity simulations, which challenges the commonly held assumptions that high fidelity would be superior for learning. They posit several theories for their findings, which include: (a) drawing from cognitive load theory, they suggest that too many “additions to the learning task may detract from learning because of our limited ability to process incoming information” (pg. 643); (b) fidelity can be distinguished between engineering fidelity (reflection of the environment) and psychological fidelity (how



well the simulator can cue complex mental tasks that allow a learner to recognize the actions required), and to achieve mastery and transfer, a learner needs practice across multiple types of psychological fidelity; and (c) there has been no scaffolding of skills when students are first and only introduced to high fidelity contexts, and as a result, they don't have the hidden skills to perform many of the functions within the simulation system as "training in so-called 'simple' motor skills generally requires considerable practice" (p. 645).

Nowacek, R. S. (2011). *Agents of integration: Understanding transfer as a rhetorical act*. Southern Illinois University Press.

Nowacek's study of a three-semester interdisciplinary learning community also aims to explicitly study the transfer of writing knowledge but in doing so complicates much of the previous empirical work on transfer. By studying writing in a general education interdisciplinary learning seminar, which linked three courses in history, literature, and religious studies, Nowacek was able to capture both general and discipline-specific writing instruction received by 18 students and taught by three team-teaching instructors in the second semester of the seminar. Building on a theoretical framework informed by rhetorical genre studies, sociocultural approaches to transfer, and activity theory, Nowacek traced how students experienced genres as social and rhetorical resources, but more so as catalysts for making conceptual connections across disciplinary expectations occurring in the same classroom (p. 12). Most centrally, she offers a theory of transfer as dynamic "recontextualization"—not mere application but adaptation and transformation—of writing knowledge, with students as "agents of integration" who enact rhetorical strategies that help them "see" interdisciplinary connections (perceive them) and then "sell" those connections (convey them to others) in their writing, to "justify the value of the connection within the text itself" (p. 53).

Petraglia, Joseph. (1995). *Reconceiving writing, rethinking writing instruction*. Lawrence Erlbaum.

This edited collection asked if teaching students generic writing skills in first-year writing could really stand up to the field's growing theoretical and empirical consensus that writing is a situated, contextu-

ally embedded activity. Central to this examination is Petraglia and others' challenge to FYW for its lack of rhetorical context within the classroom setting and its lack of any imagined rhetorical context (be they for additional academic or workplace writing) beyond the classroom. In other words, scholars questioned how a class based on the autonomous model of literacy (where writing skills can be generalized across all contexts) could possibly help students learn to write, given that their future writing situations (especially those in workplace and advanced disciplinary settings) could not resemble those in FYW.

Reiff, M. J., & Bawarshi, A. (2011). Tracing discursive resources: How students use prior genre knowledge to negotiate new writing contexts in first-year composition. *Written Communication*, 28(3), 312–337.

Through a multi-institutional inquiry into students' prior genre knowledge, Reiff and Bawarshi examine how students enrolled in FYW make use of genre knowledge acquired in high school settings. Drawing on analysis of surveys, interviews, and texts collected, Reiff and Bawarshi present a two-part argument. First, they suggest that study students fall into two categories: those who are able to break down prior genres into parts and use those appropriately and those who attempt to import whole genres into new situations. Second, they suggest that these two types of study students are better understood as boundary guarders and boundary crossers. Boundary guarders, who have a difficult time accepting their status as novice writers, may struggle with transfer of prior genre knowledge. Boundary crossers, on the other hand, are more willing to accept their status as novice writers and seem more likely to use elements of prior knowledge in new settings.

Robinson, A., & Mania, K. (2007). Technological research challenges of flight simulation and flight instructor assessments of perceived fidelity. *Simulation & Gaming*, 38(1), 112–135.

Based in aviation education, Robinson and Mania aim to distinguish between perceptual and technological fidelity and emphasize the role that human perception and judgement has on how a learner interacts with a simulator system. They argue that “perceptual fidelity is not

necessarily induced by exact physical simulation” (134), and thus the on-going challenge for creating high fidelity simulators is to understand how to cue learners to experience the simulator as though it were a real task. The challenges here include the multiple types of fidelity required for a flight simulation to be perceived as “real.” They suggest differentiating between types of “fidelity metrics” to “ignore certain shortcomings for which the human perceptual system is not sensitive and work on problems that induce high psychophysical sensitivity” (p. 125).

Szulanski, G. (2000). The process of knowledge transfer: A diachronic analysis of stickiness. *Organizational behavior and human decision processes*, 82(1), 9–27.

Working in the field of knowledge management and knowledge transfer, Szulanski draws on his surveys of employees at large corporations to argue that knowledge transfer within an organization is neither automatic or costless. Instead, he identifies a taxonomy of obstacles that result in “stickiness”—that is, knowledge that does not easily transfer from one individual to another.

Tuomi-Gröhn, T., & Engeström, Y. (2003). *Between school and work: New perspectives on transfer and boundary-crossing*. Pergamon, 2003.

An edited collection, informed by Engeström’s activity theory model of expansive learning, focused on vocational education and training. In addition to chapters exploring vocational education programs in countries such as Germany, Ireland, Finland, and Norway, the volume is anchored by several theory-building chapters. These include a reprint of King Beach’s *RRE* piece on consequential transitions and two early chapters by Tuomi-Gröhn and Engeström arguing for a change in focus from the transfer of knowledge from one context to another to an extended focus on the significant learning that can emerge from the interface between multiple activity systems.

Walsh, J. P., & Ungson, G. R. (1991). Organizational memory. *Academy of Management Review*, 16(1), 57–91.

One of the early taxonomies of organizational memory, this article is frequently cited within the knowledge management scholarship. They define organizational memory as “stored information from an organization’s history that can be brought to bear on present decisions” (a view of inter-personal knowledge transfer) and as having identifiable stages of acquisition, retention, and retrieval. Particularly helpful are their six “retention facilities”: individuals, culture, transformations, structures, ecology, and external archives.

Wardle, E. (2009). “Mutt genres” and the goal of FYC: Can we help students write the genres of the university? *College Composition & Communication*, 60(4), 765–789.

In this article, Wardle challenges teachers and scholars to recognize writing assignments in FYW as “mutt genres,” defined as “genres that do not respond to rhetorical situations requiring communication in order to accomplish a purpose meaningful to the author” (p. 777). Wardle points to how larger institutional structures of FYW limit teachers’ ability to engage students in dynamic and transnational disciplinary genres. She offers several resolutions in response to this paradox. First, teach genres as boundary objects that allow students to connect their writing with that done in other disciplines. Second, teach meta-awareness of genres through genre analysis of university and discipline-specific writing. Here, students “analyze academic genres rather than learn to write academic genres” (p. 783). These suggestions are important features of the writing about writing (WAW) pedagogy introduced here and elsewhere.

Wegner, D. M. (1987). Transactive memory: A contemporary analysis of the group mind. In *Theories of group behavior* (pp. 185–208). Springer.

Here and in an earlier article (Wegner et al., 1985), Wegner sets forth a theory of transactive memory grounded in the experiences of romantic couples who remember more together than they can individually. Rather than each person remembering every experience, they develop

“transactive memory systems” that rely on “directories” to help them remember who has remembered what information. Subsequent knowledge management scholars extended this work to small work groups and even larger workplace organizations.

Yancey, K. B., Robertson, L., & Taczak, K. (2014). *Writing across contexts: Transfer, composition, and sites of writing*. Utah State University Press.

This book synthesizes research and theory on transfer in writing studies as well as reports on (and offers suggestions based on) a qualitative study of a teaching for transfer (TFT) course in FYW. Noteworthy features of TFT are “key terms, reflection, and a theory of writing designed as interlocking components aimed at helping students develop a conceptual framework of writing knowledge that would transfer across contexts” (p. 67). According to these authors, the effectiveness of this approach for transfer is heavily influenced by students’ prior knowledge and how that knowledge was or was not put to use in new writing situations. Overall, these authors suggest that theoretically informed curricular design can aid in transfer, with the caveat that transfer of writing-related knowledge cannot be guaranteed.