¹⁰ Writing across Contexts: From School to Work and Beyond

In addition to examining transfer of learning in the contexts of firstyear writing, writing across the disciplines, and writing centers, writing studies scholars have also focused on transfer of writingrelated knowledge from school to workplaces and beyond. Whereas the workplace-based research of industrial and organizational psychologists (described in Chapter 3) was motivated by a financial exigence (do the millions of dollars invested in training influence actual workplace practices?), the research of writing studies scholars tends to be motivated by an institutional exigence: do the classroom experiences of students in FYW and later writing-intensive courses adequately prepare them for the demands of the workplace?

Unlike the work of industrial and organizational psychologists, these studies of workplace writing do not include a shift from behaviorist and then cognitive-inspired studies, adopting instead a focus on social contexts from the start. Specifically, this research on school-towork transfer of learning about writing has been strongly influenced by three theoretical frameworks: Lave and Wenger's (1991) concepts of community of practice and legitimate peripheral participation, Miller's (1984) theorization of the rhetorical nature of genres, and Engeström's (2014) model of activity theory. Thus, the chapter begins with a brief review of those frameworks.

The remainder of the chapter is organized around methodological and then pedagogical concerns. Methodologically, the research on the transition from school to work can be characterized as focusing on specific contexts (examining particular workplaces or classrooms), specific individuals (often taking a longitudinal view spanning years or even decades), and activity systems (focusing not on the transit of individuals but the interfaces between larger institutional organizations). Much of this research, quite predictably, follows writers into their workplaces, studying how writers learn to understand and succeed with the demands of workplace writing. With some notable exceptions (see the section on *Studying individual writers over time and diverse contexts*), this research tends to focus on new employees and remains focused on the classroom-workplace relationship rather than on self-sponsored or civically engaged writing.

Pedagogically, a large portion of the research (and consequently of this chapter) focuses on instructional choices—perhaps not surprising, given writing studies' scholars abiding interest in the transition from school to work. Specifically, this chapter identifies four pedagogical contexts: writing about writing classrooms, classroom-based interactions with clients, workplace-based internships, and adult learning classrooms where prior work experiences sometimes inform school learning. A recurring concern throughout all four is the question of how authentically the instructional experience can replicate the demands of a workplace. Whereas some approaches seek to maximize verisimilitude (the discussions of simulations here clearly echo the discussion of simulations in Chapter 4 and may even remind some readers of early preoccupations with identical elements in Chapter 2), others question the necessity of verisimilitude as well as the assumption that school will always precede work. Throughout the chapter, the role of personal and professional identities also emerges as central.

Theoretical Frameworks for Understanding Writing in Workplaces

Of the three frameworks that writing studies scholars most often draw on in their studies of the relationship between school and work, the framework most clearly tied to the situative learning perspective articulated in Chapter 2 is Lave and Wenger's (1991) theories of situated learning. Whereas the scholarly tradition synthesized in Chapter 2 turned most often to Lave's work on mathematical reasoning in everyday contexts (Lave, 1988), writing studies scholars seeking to understand how individuals learn to participate in a workplace culture have found Lave's work with Wenger especially generative. Although Lave and Wenger never take up questions of writing or transfer of learning directly, their explorations of apprenticeship and learning in situ have had a profound influence on studies of learning to write in workplaces. More specifically, they began their work with an interest in apprenticeships, studying (sometimes through careful analysis of the previous scholarship of others) how people learn to become midwives, tailors, butchers, and more. Lave and Wenger's analyses suggest that apprentices don't learn through explicit instruction or immediate replication of the practices of an expert; rather they learn from participation in the community of individuals engaged in the activity the apprentice wishes to learn, a group Lave and Wenger term a "community of practice."

> [A]pprentices gradually assemble a general idea of what constitutes the practice of the community. This uneven sketch of the enterprise . . . might include who is involved; what they do; what everyday life is like; how masters talk, walk, work, and generally conduct their lives; how people who are not part of the community of practice interact with it; what other learners are doing; and what learners need to learn to become full practitioners. (p. 95)

The key to successful participation in a community of practice, the "defining characteristic" (p. 29) of situated learning, is legitimate peripheral participation (LPP). LPP refers to "the development of knowledgeably skilled identities in practice" in the context of a community of practice's "characteristic biographies/trajectories, relationships, and practices" (p. 55).

Importantly, these concepts of communities of practice and legitimate peripheral participation are meant to resist the misconception that a community of practice is a static, stable discourse community:

> Given the complex, differentiated nature of communities, it seems important not to reduce the end point of centripetal participation in a community of practice to a uniform or univocal "center" or to a linear notion of skill acquisition. There is no place in a community of practice designated "the periphery" and most emphatically, it has no single core or center. Central participation would imply that there is a center (physical, political, or metaphorical) to a community with respect to an individual's "place" in it. Complete participation would suggest a closed domain of knowledge or collective practice

for which there might be measurable degrees of acquisition by newcomers. We have chosen to call that to which peripheral participation leads full participation. (Lave & Wenger, pp. 36-7)

Scholars interested in transitions from school to work frequently invoke Lave and Wenger to establish a theoretical framework that privileges a focus on how interactions between newcomers and more established members of a community enable newcomers to make sense of and participate in that community. Through this focus on the learning of apprentices—that is, individuals in transit from earlier communities of practice to a new community of practice—Lave and Wenger's work helps illuminate the complex social dimensions of transfer of learning.

A second theoretical framework proves especially useful for scholars interested in how written documents influence and are influenced by workplace cultures. Such scholars frequently turn to Miller's (1984) work on the rhetorical nature of genres and especially to her definition of genres as "typified rhetorical actions based in recurrent situations" (p. 159). Miller and other rhetorical genre theorists have also elaborated upon the crucial role that "antecedent genres"—those genres already known to an individual—can play in interpreting and generating responses to situations.

Seen as a type of rhetorical action rather than simply a static collection of organizational or stylistic conventions, genres provide a path for understanding and participating in the work of a given community, whether at school (see also Chapter 8 on WAC) or in a workplace. It is not uncommon for researchers examining workplace writing to focus on genre as a site of apprenticeship: like any other apprentice, new employees in an office can learn the values and jargon of a particular workplace by co-authoring or "document cycling"¹⁷ (Paradis et al., 1985) with more senior colleagues. Genres are not straightjackets: individual authors can ignore genred expectations, flouting them to greater or lesser effect. Workplace genres can evolve over time, in response to changing work conditions and the innovations of various individuals. Genres are, nevertheless, stabilized-for-now expectations (Schryer, 1993) that provide an important framework for the learning of new employees. They are also, therefore, a valuable theoretical lens

^{17.} An iterative "editorial process by which [managers] helped staff members restructure, focus, and clarify their written work" (p. 285).

for scholars seeking to understand workplace writing and its relationship to school-based writing instruction.

Finally, for scholars seeking to understand the interrelationships between different workplace cultures, or the cultures of school and of work, Engeström's (2014) modeling of activity system theory proves particularly useful. Engeström's framework encourages scholars to understand not only the tensions within an activity system but also, importantly, activity systems in relation to one another. An activity system is diagrammed as a triangle highlighting the relationships between three components: *participants*, working on a particular *object* (towards a particular *motive*), employing specific mediational *tools*. Later (second- and third- generation) representations of activity systems include additional elements such as rules, community, and divisions of labor (See figure 2). Scholars employing an activity theory framework often use this triangular representation to illuminate conflicts within and between systems. For instance, Russell and Yanez (2003) analyze how a single student participates in multiple activity systems-often using what ostensibly seem to be the same mediational tools to achieve very different motives. The motive for writing a book review for a school newspaper, they note, can be very different from the motive for writing a book review for an advanced Irish history course.

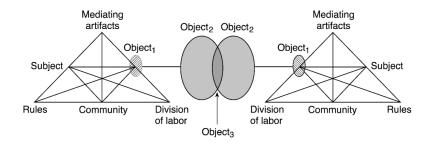


Figure 2: Two interacting activity systems as minimal model for the third generation of activity theory, in Y. Engestom (2001) "Expansive Learning at Work"

Individuals participating in multiple activity systems may perceive those conflicts with varying degrees of awareness. In some cases, the conflicts may lead perhaps to a "double-bind," which might lead the individual to shut down from the cognitive dissonance, dismissing the competing expectations as mere idiosyncrasies of individuals. In other cases, the conflict might be transformed into an opportunity for "learning by expanding"—that is, developing a better understanding of how multiple activity systems exist in relation to each other. Thus, while the concepts of *communities of practice, legitimate peripheral participation*, and even *genre* often train their gaze on a single community, cultural historical activity theory prompts scholars to consider the interrelations between multiple communities. By focusing on the potential that participating in multiple activity systems may have (for both doublebinds and learning by expanding), the activity theory framework is particularly useful for illuminating the challenges of moving from school to work when conflicts between those activity systems arise.

Nevertheless, these three frameworks are not mutually exclusive, or even in competition. A significant portion of the scholarship synthesized in the pages that follow invokes two or even all three of these theoretical frameworks. The discussion in the next half of this chapter is organized around the units of analysis adopted in various studies, that is to say, where researchers train their gaze.

Defining the Unit of Analysis for Studying the School-to-Work Relationship: Specific Contexts, Specific Individuals, and Activity Systems

Scholarship on how individuals repurpose what they've learned in school when they enter the workplace can be productively organized around units of analysis—that is, the scope of the data researchers collect. At the risk of oversimplifying, we identify three units of analysis: studies that focus on *specific school and work contexts*, often comparing how writers operate within them; studies that hone in on *particular individuals*, tracking them over long periods of time and across diverse contexts, as they repurpose their knowledge and abilities; and studies that focus not on individual classrooms or workplaces or individuals but on the *interactions between larger activity systems* as a context for transfer of learning.

Studying Specific School and Work Contexts

This category of studies on the transition between school and work envelops so much research that it can be further divided into three subcategories: studies that work to name the particular rhetorical skills necessary for writers transitioning between school and work; studies that use the framework of discourse community to examine the progress of individuals as they work to negotiate the shift from novice to expert in a single workplace; and studies that examine how individuals negotiate the novice-expert transition by focusing on the affordances and constraints of genre.

Rhetorical Skills. Under this heading we group studies that focus on skills or knowledge that individuals might carry from context to context. Ford (2004), for instance, asks "what existing rhetorical knowledge do students in engineering classrooms have, and in what ways do students transfer knowledge of these strategies and skills between contexts?" (p. 301, emphasis added); she operationalizes rhetorical knowledge as six textual features highly valued in technical writing courses: "audience awareness, sense of purpose, organization, use of visuals, professional appearance and style" (p. 302). Quick (2012) focuses on *rhetorical adaptability*, a skill that might manifest in the mastery of textual elements or conventions in particular documentssuch as mentioning the job for which they are applying in the first paragraph and making more you than I statements in job application cover letters. The results of these studies that look for the presence of textual conventions in writing consistently disappoint their authors: the students in Quick's study evidence no greater levels of success on a letter writing task; Ford's students dutifully reported that "the writing skills developed in my college English classes helped me during this assignment," but when pressed for details they were unable to identify "higher order rhetorical strategies" (p. 308).

Other studies focus less on evidence of transfer in texts and more on the rhetorical habits of mind students bring to their efforts in the classroom and workplace. Brent (2012), for instance, focuses on *rhetorical judgment*. Following six university students into their co-op semester (an instance of legitimate peripheral participation in the workplace), he finds that although three writers evidenced ability to find and analyze model genres critically, they could not locate a moment in their undergraduate education when they learned to do so: Emma described her knowledge as "a combination of everything I have learned in life" (p. 578) and Christina spoke repeatedly of "common sense," which Brent points out is, in fact, "very sophisticated rhetorical knowledge" (p. 581). Brent's study focuses on the portable rhetorical knowledge that students develop and draw on in their workplaces: "the students seemed to be transferring not so much specific knowledge and skills as a general disposition to make rhetorical judgments" (p. 589).

What these studies share—whether they look for evidence of textual conventions in written documents or evidence of conceptualizations of rhetoric in student interviews—is a focus on the idea of portable rhetorical knowledge which, once acquired, can be put to use across multiple contexts. In this, they echo earlier work in cognitive psychology (Chapter 2) focused on the power of general heuristics, but these findings are somewhat more difficult to reconcile with Perkins and Salomon's (1988) suggestion that high-road transfer involves a mindful abstraction that can be consciously identified and articulated.

Discourse Community. In the tradition of studies that examine schoolto-work transitions through the lens of discourse communities, one of the most frequently cited is Anson and Forsberg's (1990) articulation of a developmental schema based on the experiences of six college seniors placed in internships. Students often begin with a sense of expectation, entering their internships confident that they will be able to successfully draw on previous writing experiences and strategies. The interns soon enter a stage of *disorientation*, in which they tend to feel isolated and overwhelmed. Ultimately, though, the interns in Anson and Forsberg's study entered into a stage of transition and resolution, which allowed them to "finally integrat[e] experience and reflec[t] on the intellectual changes afforded by writing in the new context" (p. 208). Successfully entering and communicating within the discourse community of the workplace, Anson and Forsberg conclude, is about more than simply applying what was learned in school; it involves becoming a student of that particular workplace culture, adapting to the expectations of a particular discourse community.

Winsor (1996) also uses the framework of discourse community to study four engineering students, tracking in more depth and over a longer span of time how new employees navigate the acquisition of writing expertise in a single workplace. After talking with students who were completing an undergraduate degree that included several semesters of co-op placement, Winsor concludes that although all four

of her focal students had acquired a richer sense of audience expectations, only one focal student had developed a sense of how workplace documents could create rather than simply document corporate reality. The others persisted in the belief that their jobs were to document data rather than persuade. However, Winsor continued to interview the same four writers-all of whom were offered full-time employment with their co-op companies—at regular intervals over the next several years and found that their sense of the importance of "documentation" increased significantly. Winsor defines documentation as "the representation of past or future action used to build agreement about how that action is to be defined or perceived" (p. 207); documentation, in this view, isn't just paperwork after the fact, but a means for engineers to protect themselves from liability or prompt action from a client or another corporate division. Producing documentation, then, is vital for full-time long-term employees in ways that simply would not register for short-term student workers. In short, Winsor argues that as individuals become increasingly authentic and authorized participants within their discourse community, their writing grows more effective and more richly theorized. Her methodological commitment to tracking writers over many years allows her to illuminate how the understandings of writing that engineers transferred from their classroom studies were, over time, revised.

Beaufort (2007) tracks a similar progress from outsider to insider status by following "Tim" from his first-year writing class, through various history and engineering courses, and eventually into his work as an engineer where he demonstrates rhetorical savvy: "In only two years time and without any formal coaching on his writing by his employer, Tim could articulate many of the social constraints on written texts and the necessary processes and conventions" (p. 140). Beaufort's earlier work (1997, 1999) similarly exemplifies not only the discourse community approach to understanding the school-to-work transition, but also the ways in which researchers often draw on multiple theoretical frameworks. A discourse community, Beaufort explains, is

> a dynamic social entity within which a set of distinctive, yet changeable, writing practices occur in relation to other modes of communication as a result of the community's shared values and goals, the material conditions for text production, and the influence of individual community members' idiosyncratic purposes and skills as writers. (1997, p. 522)

Over multiple publications, Beaufort (1999, 2007) develops a model of writing expertise that identifies discourse community knowledge, genre knowledge, and rhetorical knowledge (as well as subject matter and writing process knowledge) as existing in "symbiotic relation to each other (1999, pp. 63–4); in Beaufort's model, the circle representing discourse community knowledge encompasses the other four overlapping knowledge domains. The primacy of discourse community knowledge over the other domains of knowledge suggests the distinctive quality of studies focused on discourse communities: namely, a focus on how individuals develop increasing expertise in one particular discourse community.

Research indicates that students who have some prior cultural and organizational knowledge may find their way more rapidly into the social complexity of organizations. Artemeva (2005), for instance, argues that novices with enough cultural capital can sometimes follow an alternate path: Sami, a recent engineering graduate whose father and grandfather were both engineers and who possesses a remarkable sense of the kairotic moment available to him in his corporate engineering culture, was able to catapult over several layers of hierarchy to get his implementation plan approved in his first year of employment. Artemeva recounts Sami's savvy use of spoken and written genres (written proposals, oral presentations) and interpersonal connections (he had the support of his manager's supervisor) to critique and alter the expected pathways even as a new employee. From the example of Sami and others, Artemeva (2009) emphasizes the importance of agency (in recognizing kairotic moments in the workplace), "cultural capital, domain content expertise, formal education, private intention, understanding the improvisational qualities of genre, and workplace experiences" (p. 172). Throughout these studies framed by discourse communities is a consistent focus on tracking how individual writers move from novice to expert status, through longer or shorter, bumpier or smoother paths as they transfer knowledge and abilities from the classroom to the workplace.

Genre Knowledge. Taken for granted throughout the studies framed by discourse communities is an interest in the development of individual writers and the existence of a relatively stable disciplinary community, assumptions that are challenged in the studies focused on how the acquisition of professional expertise is mediated through written and spoken genres. Certainly, these are not exclusive categories: many

scholars focused on discourse communities also attend to the function of genres in those communities. Nevertheless, what distinguishes these studies is their interest in uncovering how genres function in different contexts (i.e., at school versus in workplaces) to offer affordances and constraints for individuals moving from school to work (and in some cases back again).

In her study of how two employees acclimated to their new positions at the Job Resource Center (JRC), Beaufort (1997) documents how new employees like Ursula and Pam sometimes initially resisted the conventions that reflected community norms, but eventually "demonstrated their understanding of the ways in the which genre . . . needed to reflect the underlying values and standards for accomplishing goals" of JRC (p. 502). Such a finding resonates with the work of Anson and Forsberg and others described in the discourse community section. However, Beaufort also illuminates the exceedingly high stakes of learning not just textual conventions but the community values and identities that constellate around those textual conventions: Beaufort shares how one person was fired because she stayed "in her cubicle and wr[ote] endless internal memos rather than meeting with people face-to-face" (p. 498). Although this employee may have understood the textual conventions of the internal memo, she did not understand how work got done at JRC; in this workplace, the real value of the memo was not in the ideas it put forth, but the consensus that could be built through face-to-face talk before the memo codified those conversations. While this particular occurrence may be inflected by the employee's interpersonal skills, Beaufort's larger point ultimately focuses on the work that genres help to accomplish within the workplace. For writing studies scholars interested in transfer of learning, Beaufort's work highlights the ways in which successful transitions from school to work rely not only on knowledge of writing conventions of but the social and rhetorical functions writing plays.

A similar focus on the complex social and personal identity work negotiated through workplace genres emerges from the inquiries conducted by a coalition of Canadian scholars, most prominently gathered in two books: *Transitions* (Dias & Paré, 2000) and *Worlds Apart* (Dias et al., 1999). They examined writing in four professions—public administration, management, architecture, and social work—simultaneously in school and at work. For instance, at the same time they studied how writing was taught and used in a university social work classroom, they also studied how experienced social workers used writing in their daily workplace. From those comparisons, Dias and colleagues conclude that there is "a radical difference" between school and work (1999, p. 199), in terms of goals for the writing (p. 189), processes of scaffolding new colleagues into complex tasks (p. 190), and modes of collaboration and evaluation through document cycling (p. 194, p. 196). School and work are, as the title of the book indicates, worlds apart. This distinction is highlighted in their comparison of distributed cognition in universities and in the workplace of the Bank of Canada: "To put it simply, the . . . Governor of the BOC needs the lowliest analyst's report. The professor, however, does not need any specific student's essay in the same way" (p. 148). Because of these fundamentally different ways of building knowledge, the shift from participation in an academic community to a workplace community is often surprisingly difficult.

Traversing that gap, researchers demonstrate, is a high-stakes project that often relies on the affordances and constraints of genres. Paré (2000), for instance, illuminates the ways in which university students interning as social workers learn, through a process of document cycling with an experienced social work supervisor, genres that "allow students, literally and figuratively, to speak the same language as oldtimers" (p. 149). Parks (2001) tracks the experiences of nurses who were taught one system of writing care plans in school but encounter a very different approach to care plans in the workplace. The changes, including abbreviated diagnoses as well as a shift to medical rather than nursing language, at first appear to simply be shortcuts. Parks demonstrates, however, that for new nurses, the process of adopting these changes is in fact a means of "navigating the boundaries between a school genre and a workplace genre" and consequently a way of "signaling their identities as professionals who were progressively appropriating the culturally accepted ways of doing and seeing" (p. 415). Smart (2000) similarly notes that Bank of Canada employees authoring an article for the Bank of Canada Review spoke of "upholding their sense of professionalism in the face of critiques of their texts from more senior reviewers" (p. 243); the processes of collaboration and interaction required to learn workplace genres involve complex negotiations of personal and professional identity.

Like Anson and Forsberg, many of these studies map a trajectory of (un)learning for writers new to workplace writing—but they go even further to illuminate the ways in which genres become a site for the negotiation of identities, especially for new employees working with experienced colleagues. Throughout these studies focused on genre is threaded an interest not simply in the conventions of workplace genres, but how they are necessarily understood in the context of the writer's emerging professional identity. By writing (sometimes alone, sometimes with more experienced colleagues), new employees repurpose their existing genre knowledge in an effort to create for themselves a new identity as a valuable and contributing employee. Although these studies focus primarily on genre, they also suggest that in order to understand the role of genre in transfer we must also closely consider identity.

If genres play such an important role in workplace learning, one logical question is whether genre knowledge might be more effectively developed in university settings through explicit instruction in genre conventions and expectations.¹⁸ In an early article, Freedman (1993) takes up that question directly, drawing on existing research-particularly from Krashen in second language acquisition-to probe two hypotheses. The strong hypothesis proposes that explicit teaching may not be possible and is certainly not helpful; the restricted hypothesis posits that "teaching must always be done either in the context of, or in very close proximity to, authentic tasks involving the relevant discourse" (p. 244). Explicit teaching of genre, Freedman concludes, may be dangerously counterproductive because it can lead writers to overgeneralize and to focus on formal features rather than meaning and function—especially if the instructor is "an outsider" or has an "inaccurate representation of the genre" (p. 245). Freedman et al. (1994) further develop this position in their studies of learning in classroom and workplace contexts. They conclude that simulations unconnected to workplaces can never be more than a fiction disconnected from workplace realities; internships embedded in actual workplaces, however, can provide some powerful opportunities for learning both genres and the workplace values that inform them.

This questioning of the value or necessity of explicit instruction is further developed by Eraut (2004), who studies learning within the

^{18.} Some readers may be reminded of Gick and Holyoak's (1980, 1983) work in cognitive psychology on the relative merits of prompting analogical thinking by providing individuals with abstract explanations of principles versus providing them with one or more analogous stories.

workplace, focused both on new hires and midcareer professionals. Combining interviews with workplace observations, Eraut concludes that learning in the workplace is typically informal, invisible, and taken for granted; the resulting knowledge is tacit. There are occasions of non-tacit learning, but they tend to be reactive—"occur[ing] in the middle of the action, when there is little time to think" (p. 250) rather than deliberative or pre-planned. "Outside formal education and training settings," Eraut concludes, "explicit learning is often unplanned" (p. 250). The suggestion, in Eraut as in Freedman, is that within workplaces explicit instruction in genre is rare and therefore within classrooms can slip into irrelevance. Ultimately, these researchers raise serious questions and express deep skepticism about the ability of schools to prepare writers for work.

Studying Individual Writers Over Time and Diverse Contexts

Under this heading we place studies that focus on an individual moving among many systems, generally over a year or more. On the whole, the studies we collect here tend to resist the novice/expert and insider/ outsider dichotomies at the heart of so many other individuals-intransit studies; they are interested instead in how identities shape and are shaped by writing over time. These studies also resist the casting of school and work as worlds apart; this is the tradition of research most likely to incorporate a focus on self-sponsored writing and other writing activities that aren't clearly academic or for work. To the degree that there is overlap between the school-to-work studies that dominate this chapter and the home-to-school studies discussed at length in Chapter 5 ("Transfer Implications from Sociocultural and Sociohistorical Literacy Studies), that overlap can be seen most clearly in this strand of research.

Lemke's (2000) concept of *heterochrony*, the interlocked nature of various timescales, offers an important reminder of how school and "real" life are always inextricably linked. In Lemke's view, individual students are always in the process of enacting who they are in the world; in any given classroom, students

are mainly going about the business of learning to be six-yearolds or twelve-year-olds, masculine or feminine, gay or heterosexual, middle-class or working-class, Jewish or Catholic, Irish-American or Jamaican-American, or any of the many dozens of stereotypical identities for which there are identity-kits available in a particular community (cf Gee 1992). Whatever we offer in the classroom becomes an opportunity to purpose this longer-term agenda of identity building; our primary affective engagement is with this agenda, with becoming who we want to be, not with learning this or that bit of curriculum, except in so far as it fits our particular agenda or insofar as "being a good student" or "not falling for that bullshit" fits in. (p. 286)

To dichotomize school and work, novices and experts, is to ignore how much overlap people experience in their lives-and how long those overlaps extend. Wertsch's idea of the "spin off" reminds us that the "repurposing of cultural tools across contexts is the rule rather than the exception" (in Roozen, 2010, p. 28). Prior and Shipka (2003) term such overlaps chronotopic laminations—"the simultaneous layering of multiple activity frames and stances . . . which are relatively foregrounded and backgrounded" (p. 187). They provide the example of Melissa Orlie, a professor of political science and women's studies, who had recently published an academic press book wrestling with questions of living ethically and acting politically. Through analysis of interviews, drawings, and the text of Orlie's book, Prior and Shipka illuminate a network of overlapping influences on that book: friends, classmates, and professors from Orlie's undergraduate studies; her "varied moments of writing, reading, walking, and gardening" (p. 201); and the formative experience of living in a not-yet-gentrified neighborhood in Brooklyn. When looked at from this angle, school and work and even home are not worlds apart; they are inseparable. Transfer of learning, from this perspective, is a common, everyday experience.

Roozen's work offers example after example of similarly interconnected reading and writing practices. One student, Kate, finds that her work in her literature and creative writing classes is powerfully influenced by her strong and long-standing identification as a writer of fan fiction and creator of fan art; the interconnections are so strong that they lead Kate to pursue an alternate career path when her fannish commitments are not valued in her creative writing course (Roozen, 2009). Another student, Brian, is an undergraduate math education major who learns about pi and negative infinity in his math class, incorporates those concepts into a recurring comedy sketch performed with his improv group (a poetry slam evaluated with mathematical symbols), and then uses those repurposings as a springboard for instructional work he does as a student teacher in the workplace of his middle-school math classroom. "Brian's use of specialized mathematical discourse," Roozen demonstrates, "is not limited to privileged sites of school and work; rather, it circulates through these extensive nexus of practice that connect the literate activity of his school classes, his sketch comedy, his gaming, his teaching, and perhaps others as well" (2010, p. 48). Charles, a first-year student struggling with speeches in the prerequisite to his Broadcast Journalism major, draws on a complex web of interests and experiences to improve his oral presentation skills: he began reading his high school poetry at the university's African American cultural center's weekly poetry readings, and eventually draws on his journalism experiences as well as the support of friends and his diverse reading interests to develop a standup routine for the university open mic (Roozen, 2008). In this way, Charles improves his speech grade from an F to an A, keeping open a curricular path to the employment in broadcast journalism he desires. The resources Charles, Brian, and Kate draw on as university students stretch back years and connect with a wide range of activities and identities.

In this way, Roozen's research helpfully illuminates how the extracurriculum might enrich our ideas of transfer—but even within the context of workplace writing, Roozen's research highlights how learning to write as a math teacher, for instance, is not a compartmentalized skill set: it is laminated by all the overlapping engagements of Brian's life. To understand transfer from this research perspective is not about tracking the acquisition of expertise in a single domain but understanding how moments and laminations add up to lives. Consequently, this type of research—focused as it is on how individuals accrue and repurpose knowledge across many different contexts resonates with other discussions (in psychology [see Chapter 2] and literacy studies [see Chapter 5] and elsewhere) that focus on adaptive expertise and the ability to successfully navigate novel contexts.

Going further, Prior (2018) develops the idea of a "trajectory of semiotic becoming" to challenge the "worlds apart" findings of Dias and colleagues (1999). Tracing the 25-year development of Nora (his daughter) from her kindergarten interests in *Nature* programming on PBS to her field work as a professional biologist in Uganda, he argues that "her emerging patterns of interest, what she chose to read, watch, talk about, and do, what she selectively oriented to in her cultural

worlds and what she rejected . . . built her pathways to becoming a biologist." (It may also be that Nora shares cultural capital from her academic family that might bear on the ease of movement in the domains she explored as child and adult, as suggested in Artemeva [2005, 2009].) Based on Nora's example and others in progress, Prior concludes that the "worlds apart" thesis is an "absurd" claim that is "fundamentally wrong"; he argues that transfer of learning is not "a fragile, torturously hard-won achievement" but rather that "continuities of learning across time and setting are a fundamental necessity for any conceivable account of human development." For Prior, these profoundly different views are grounded in different methodological approaches: instead of focusing on discrete discourse communities, he describes his own work as "draw[ing] on sociocultural/CHAT theories that take learning/socialization to be the mediated production and co-genesis of both the person and society across heterogeneous times, places, and activities."

Other scholars turning their attention to the development of writing over decades have been guided by other theoretical frameworks, most notably theories of life-course human development. Bazerman and a group of multi-disciplinary colleagues (2018) worked over several years to develop eight principles that might guide future inquiries into writing development across the lifespan. Although their edited collection is filled with essays focusing on different ages and contexts from a range of disciplinary perspectives, of particular interest in this chapter is the work of Brandt who re-analyzed interviews with sixty adult workplace writers in light of life-span development theories. Paying particular attention to workplace roles, historical moments, and dispositions, Brandt (2018) argues that her data-while imperfect-are deeply suggestive and highlight again the co-constructive interactions between personal identifications and writing in the workplace. Not only does Brandt argue that "writing orientations developed through workplace practice [get] incorporated into a person's more general dispositions towards life" (p. 266), she also tracks ways in which early childhood experiences were "creatively transformed into productive orientations to writing" (p. 265). Such findings, she argues, "force an expansion of what is considered transfer in writing" (p. 265). Drawing on the idea of "structuring proclivities"-the idea of prominent lifespan theorist Urie Bronfenbrenner—or dispositions, she calls on future researchers to "expand the search (and what we consider searchable)

for the psychological processes that make up life-to-writing transformations, transfers, and amalgamations" (p. 265).

Throughout these studies is an insistence that school and work are not worlds apart, but remain closely tethered and mediated by the dispositions, laminations, and dynamic identities of the writer.

Activity Systems in Contact

In this final category we place studies that are fundamentally interested not in individuals shifting among contexts but in the relationships between those contexts or domains. Whereas Lave and Wenger's idea of communities of practice "emphasizes the practices themselves as a unit of reflection and analysis" (Beach, 1999, p. 114), Engeström and colleagues direct attention to the relationship among various activity systems. In its so-called third generation, activity theory attends not just to activity systems but to their overlaps: "Theories of learning typically speak of the outcomes of learning in terms of knowledge, skills and changed patterns of behavior. In expansive learning, the outcomes are expanded objects and new collective work practices, including practices of thinking and discourse" (p. 339). Tuomi-Gröhn et al. (2003) explain that their unit of analysis for understanding learning becomes "the collective activity system" and that "what is transferred is not packages of knowledge and skills that remain intact; instead the very process of such transfer involves active interpreting, modifying, and reconstructing the skills and knowledge transferred" (p. 4). The focus in such research is no longer individuals shifting among discourse communities or activity systems, but the sustained overlaps between activity systems which are themselves altered by the shuttling of individuals between them.

Particularly useful for this understanding of how activity systems can change one another are the concepts of *boundary zones*, *boundary encounters*, and *boundary objects*. Boundary objects can be either material or semiotic and are important for transfer because they "have different meaning in different social worlds but their structure is common enough to more than one world to make them recognizable, a means of transition" (Star and Griesemer quoted in Veillard, 2012, p. 257). One use of boundary objects is visible in Ludvigsen et al.'s (2003) study of sales engineers within a Norwegian firm that develops heating and ventilation systems. Sales engineers negotiate with customers, securing business through the writing of bids; such work positions them as boundary spanners within their own firm. The bid is a boundary object that "combines standardization and flexibility" and "creates both common and different meanings depending on the position of the person who 'reads' the bid" (p. 301). Through the genre of the bid, a sales engineer can—indeed must—communicate with their customers as well as their engineering colleagues, negotiating what is possible within the constraints of time and budget.

Another example, taken from Konkola et al.'s (2007) description of an occupational therapy internship, offers an even clearer example of how the various activity systems themselves may be changed by extended contact via boundary objects. In this study, an occupational therapy student interning at a hospital contacted a researcher at a Finnish university to learn more about a relatively untested method: mirror rehabilitation. Working to implement this new rehab technique was the occasion for multiple meetings between the intern, her university professor, and the occupational therapist supervising the intern; together they worked-through their focus on the boundary object of mirror rehabilitation—to develop a practice that changed (in small but discernible ways) both the activity systems of the university and occupational therapy. Such an approach "shifts the emphasis from the individual transfer of knowledge to the collaborative efforts of organizations to create new knowledge and practices" (p. 211) and exemplifies the focus of some researchers on how activity systems themselves can transfer knowledge, practices, and values to one another.

Although this research focus on the interaction between activity systems themselves (rather than on individuals participating in multiple activity systems) is relatively rare, instructors have—as the next section on pedagogical approaches illustrates—sometimes taught students about cultural historical activity theory as a means of helping students understand their own professional, rhetorical situations.

Pedagogical Contexts for Examining the School-to-Work Transition

The first half of this chapter identified three common theoretical frameworks (communities of practice, genre theory, and activity theory) and distinguished three units of analysis for studying transfer of learning from school to work (focus on specific workplaces, focus on specific individuals over time and diverse contexts, and focus on activity systems) that draw on one or more of those frameworks. In the remainder of this chapter, we review the research on transfer of learning in four different pedagogical contexts: writing about writing courses that include observations of workplace writing, classroom-based interactions with clients, workplace-based internships, and adult education.

Professional Writing Courses with a Writing About Writing Focus

We turn first to the professional writing course designed for students from a number of majors. Such courses are a marked contrast to technical writing courses linked to a very particular profession (such as engineering) or subfield (such as industrial engineering). Within multi-major professional writing courses, a focus on the writing about writing (WAW) approach to curriculum design has emerged. More commonly found in first-year writing courses (see Chapter 7), the WAW approach adopts a content focus on research in writing studies as a means of promoting transfer of learning about writing (Downs & Wardle, 2007).

Kain and Wardle (2005), for instance, take up the question of whether "teaching communication in a classroom setting can adequately present (or even represent) the rhetorical and practical realities of complex professional communication situations" (p. 113). Although Wardle's work here with Kain predates her later articulation of WAW with Downs (Downs & Wardle, 2007), this approach does resonate easily with the WAW approach in that the course is grounded in activity theory-not only as the organizing framework, but as content. In their two different courses, Kain and Wardle introduced their students to the principles of activity theory and then asked them to go into workplaces, to observe and interview participants, then to analyze the communicative practices of that workplace. Although documenting instances or patterns of actual transfer is beyond the scope of their study, they find that their students' analyses of workplaces were more complex than those received in previous iterations of the course not informed by activity theory, and they predict that "teaching students to research genre use in complex workplace contexts using activity theory encourages high road transfer" (p. 135).

Several authors aim to complicate and diversify WAW approaches to writing in the workplace: Read and Michaud (2019) inventory ten other instructors already taking a WAW approach in professional writing courses; one commonality that emerges is the emphasis on teaching "students how to do their own research about writing in workplace contexts" (p. 160)—but how they do so varies. Cutrufello (2019) describes a curriculum that privileges reflective writing and cueing of future transfer; its central project is a recommendation report. Research on these WAW approaches to the multi-major professional writing course have not yet systematically documented the consequences of a WAW approach for transfer from the multi-major professional writing course to workplaces; such work is a necessary next step for future research.

Classroom-Based Interactions with Clients

In this group we place pedagogical contexts that promote interactions with clients—either real or imaginary—but remain based within a university classroom. More specifically, we include in this category three distinct types of classroom-based interventions: simulations, client-based projects, and service-learning projects. These pedagogical contexts rely on varying degrees of fidelity to promote transfer of learning from school to work.

Simulations. While simulations may gesture beyond the classroom to fictionalized workplaces, there is no direct contact with actual clients or workplaces. One frequently cited study of the potential for transfer of learning within a simulation-based course offered a scathing critique (Freedman, Adam, & Smart, 1994). Students in this upper-division financial analysis course were asked to take on the role of a management consultant and provide recommendations through written and oral presentations; the textbook that provided the case studies did not prime students to look for applications of any particular theory, potentially allowing a more "naturalistic" context for learning. Furthermore, both the instructor and students went to great lengths to create the fiction of the simulation: designing assignments and providing documents to establish and maintain the fiction of the company, wearing suits to class when making their presentations, and more. Nevertheless, Freedman and colleagues conclude, "the real audience for the students was always the professor-in his role as professor" (p. 203), and students "were never deceived about this" (p. 204). The thinness of the fiction was visible both in what appeared in their projects (students elaborated on certain knowledge "to show [they] know the lines of reasoning appropriate for recommending policy within the relevant community" [p. 204]) and in what did not appear in those projects (a student stopped chasing a line of reasoning when he realized "Oh, but that would make it into a marketing case" p. 205). Spinuzzi (1996), drawing on language from Petraglia, terms this persistent challenge facing professional writing instructors psuedotransactionality; pseudotransactional writing "evolve[s] to accomplish the goals of a specific classroom rather than those of the workplace that the classroom supposedly emulates" (p. 302).

Cognizant of the limitations documented by Freedman and colleagues, many scholars still advocate for simulations as a means to promote transfer of learning about writing. Some scholars argue that increasing the verisimilitude of the simulation might increase the possibility of transfer.¹⁹ Paretti (2008), for instance, argues that to succeed, an engineering design course aiming to "engage students in authentic engineering tasks" must have instructors who "interact with students around those assignments in ways that highlight the associated social action—i.e., the purposes documents serve in the design process and in the course" (p. 493). Although Paretti's case study shows that the two teams still experience a disjoint between school and work (echoing conclusions in Freedman and colleagues' research), she proposes that one way to address the gap is to be more mindful of discourse:

> The difference is perhaps shockingly simple—something as slight as replacing "You need to include more detail in your timeline" with "I need to see more detail in the timeline to have a better sense of what you're actually planning to do, what kind of help I can provide, and whether you can realistically meet your deadline." (2008, p. 500)

Whereas Paretti focuses on ways in which the rhetorical context can be made sufficiently realistic, Russell and Fisher (2009) designed a virtual learning environment (VLE) intended to significantly increase the simulation's verisimilitude. They worked to design an online environment that would "afford a much more dynamic circulation of information and a much more complex system of genres than in a traditional VLE" (171). In other words, their fictional company immersed students and instructor not only in roles, but in an emerging "chronotope"—that is "the time-space setting invoked—the landscape

^{19.} For more on the possible importance of verisimilitude in simulations hoping to foster transfer of learning, see Chapter 4.

of interactions" (169). The VLE increased verisimilitude by requiring students to complete a series of interlocking assignments that allowed students to experience the genre system of the fictional workplace; it was, Russell and Fisher conclude, "a 'transfer-encouraging' environment" (187).

Campbell (2017) is less focused on verisimilitude than on what (following Crocco) she calls critical simulations; such simulations "produce cognitive dissonance for participants between their assumptions about a specific context and their experience of that context in a simulation" (260). Following a cohort of nursing students through multiple patient-care simulations—simulations in which students know the mechanized patient is voiced by an instructor, in which they both observe and are observed by other students, and after which they will engage in reflective group discussion—Campbell argues that simulations and workplace experiences can be helpfully understood as mutually influential. It's always clear to students that this is a classroom. Indeed, because of financial and technical constraints, the university cannot use the electronic health forms used in hospitals; students instead work in teams to develop their own charting system. Nevertheless,

> the simulation chart draws on students' prior knowledge from their clinical experiences enabling them to repurpose and play with clinical genre knowledge in a context that is focused primarily on learning. . . . [T]he simulation health record is also forward-looking, helping students to better understand how electronic charting will mediate conversations with the patient and other providers in the hospital and consider both the strengths and limitations of the genre. (p. 274)

Students' experiences with simulations may be influenced by their previous workplace experiences as well as prepare students for future workplace experiences.

In sum, throughout the scholarship on simulations runs a disagreement that threads through the workplace scholarship as a whole: are school and work worlds apart, or does communication within school always have a "realness" that can be leveraged to facilitate learning that can successfully transfer?

Client-Based Projects. Whereas simulations rely on a fictionalized client whom the students will never encounter directly, client-based

projects serve the needs of an actual client. Acknowledging Freedman and colleagues' critique of simulations, Blakeslee (2001) wonders if client-based assignments "that involve actual workplace projects are different" because they "potentially preserve more of the culture of the workplace while also allowing students to address a variety of audiences" (p. 170). She conducted teacher-research in two of her own professional writing classes, and drawing from interviews and textual analyses, she concludes that although client-based projects don't provide the immersive experience called for by Freedman and colleagues, such courses "still can *expose* students to workplace writing practices, as well as to the activity systems of particular workplaces" (p. 176).

Indeed, although they were extremely critical of the limitations of simulations, Freedman and colleagues were themselves far more optimistic about the promise of client-based projects for facilitating transfer from school to work. Freedman and Adam (2000) describe a systems analysis practicum in which students worked directly with actual clients. In this course, the professor went with the group to their first interview with the client, guiding them when necessary, and spent a lot of time with the students afterwards, reviewing what was learned. Such "authentic" tasks "provided a taste of the complexity of workplace activity" (p. 133)—a difference visible in their comparisons between this client-based project and the business course simulation. For instance, in the simulations class a student discarded a line of reasoning not because it was inappropriate for the problem but because it was not a good fit for the subject matter of the class; the performance of student roles easily trumped the "reality" of the simulation. In the systems analysis practicum, however, when one group discovered that the client's problem could be easily solved by using a piece of existing software, the instructor "simply congratulated the students on their fortuitous find and awarded them the same grade as the other students who ended up putting in countless hours to solve their client's problem" (p. 139). The course emphasis was not on performing certain student roles or obligations; the emphasis was simply on solving the client's problem. Freedman and Adam identify some criteria that helped this client-based curriculum succeed, including an exceptionally skilled instructor who had a small class, considerable autonomy, and connections to a client base.

Research by Dannels makes clear, though, that the mere existence of a client does not automatically eliminate contradictions between the activity systems of school and work. Although the teams of mechanical engineering students Dannels (2003) worked with were in fact designing a project for a real client, they had very little contact with that client; instead they spent their time with the professor, their classmates, and other professors in the engineering department. Whereas the academic context was process oriented and valued displays of knowledge, the engineering context was decidedly product oriented. The conflicts between those two systems became clear when the student engineers prepared and delivered their oral presentations, ostensibly to their clients but delivered in their classroom to their professors and classmates. When confronted by contradictory demands, the importance of identities (a recurring theme in this chapter) once again came to the fore: both faculty and students defaulted to academic identities and values. For instance, faculty evaluated the presentations with a focus on their classroom obligation to make sure students had technical knowledge: after one presentation the faculty responded, "OK, that's good, but talk to me about the real numbers now, not just the ones you prettied up for management" (p. 158).

Sounding much more like Freedman and colleagues' conclusions on simulations, Dannels declares that "School will never be the workplace; it will always be school" (2000, p. 28) and suggests that instructors incorporate more reflection and strengthen ties with the client. Freedman and Adam's research in the systems analysis practicum suggests that this last suggestion—to increase interaction with the client—is important, but that even more than that, client-based projects will only ever begin to bridge the gap between school and work if instructors allow the workplace values (e.g., an emphasis on product, rather than demonstration of process) to govern work in this clientbased classroom.

Service Learning. Another significant line of research on the learning—and transfer of learning—that takes place in client-oriented classrooms comes from the field of service learning. Although there is a great deal of scholarship on writing and writing instruction in the context of service learning, much of it is beyond the scope of this chapter. Here we focus on a small subset of articles that explicitly work to understand the transfer of learning between school and servicelearning workplaces.

Bacon (1999) frames service-learning placements as an opportunity to disrupt the usual narrative of novice students working to become

experts in a single workplace: "In service-learning programs, we create opportunities for students to move back and forth between the campus and the community in the hope that each setting will grant them access to insights that enrich their experience of the other" (p. 55). Framing the study as an inquiry into the "trouble with transfer," Bacon examines the degree to which students' history of academic success might correlate with their work in their service-learning placement. She notes first that "the most proficient academic writers produced the most successful [Community Service Writing] documents," calculating a correlation that was statistically significant and "consistent with the expectation of the faculty participants" (p. 56). But Bacon also argues that her qualitative analyses of reflective essays and interviews suggest that it was not the academic experience of writers that led to successful community writing-but rather qualities like "love for writing, . . . commitment to finding a personal connection with the topic, and . . . willingness to throw [themselves] into the work" (p. 58) that facilitate success in both academic and service-learning workplace contexts. Such findings resonate with research on the role dispositions and identities might play in transfer of learning discussed in the section "Studying Individuals Writers Over Time and Diverse Contexts" in this chapter. (See also Driscoll & Powell, 2016; Driscoll & Wells, 2012; and the discussion of dispositions in Chapter 3.)

In contrast to Bacon's interest in tracking how academic learning might influence writers' abilities to succeed in writing beyond the university, other scholars have focused attention on the degree to which the experience of writing in service-learning placements might influence students' abilities to navigate their academic writing. White (2015), for instance, followed a cohort of eight students from their service-learning oriented first-year writing course into their second semester of college; from these case studies, White argues that service-learning placements can help students develop "transferrable writing knowledge" (p. 26). DePalma (2012) similarly draws on interviews with students from a professional and technical writing course to argue for the existence of "adaptive transfer" while Alexander and Powell (2012) use questionnaires to interrogate what students learned about writing from their service-learning placements.

Service-learning placements, these researchers argue, may be especially powerful sites for two dimensions of learning. First, service learning promotes motivation that in turn facilitates learning about writing. (Readers may be reminded of how the I/O scholarship reviewed in Chapter 3 seeks to understand how training design choices [like service learning] can be correlated with dispositions like motivation.) DePalma quotes students describing how their interpersonal commitments to clients energized them to not give up on difficult projects; Alexander and Powell find that 33% of participants identify "the purpose of [their] service learning project [as] more meaningful than for a traditional assignment" (p. 53). White tracks how students were moved by their projects to negotiate the role of personal experiences and investment in academic writing.

Second, students learned, through their service-learning placements, things about writing that may likely influence their work as writers beyond the placement. DePalma focuses on the ways in which students' understandings of their ethical obligations as communicators were enhanced; Alexander and Powell argue that students identify increased "literacies in teamwork, communication, and project management" (p. 52) that may influence their work in future courses and workplaces. White's research actually follows students longitudinally from one semester to the next, allowing her to identify the ways in which students' learning about writing—including a focus on the need to read broadly in an academic conversation and finding their own investment in a project—was later parlayed into success in other classes. Through her case studies White suggests that the affective dimensions of service-learning placements may influence not simply knowledge acquisition, but a dispositional orientation towards transfer.

Winding through all these pedagogical approaches—service-learning courses, client-based projects, and simulations—is a concern regarding the realness of the work. That concern becomes much less of an issue in internships located within workplaces.

Internships

In this group we place pedagogical approaches that are primarily based not in classrooms but in workplaces through internship or co-op placements. Accounts of internships and co-ops are abundant in the workplace writing scholarship (e.g., Anson & Forsberg, 1990; Bourelle, 2012, 2014; Winsor, 1996). Some of this scholarship focuses on how individual students learn to participate in workplace settings through an internship; other scholarship focuses on the potential of internships to transform not only the individual but also the varied activity systems that come into contact via the internship.

Most commonly, scholars have focused on internships as a site of immersive learning, praising them as opportunities for learning deeply engaged in an authentic community of practice. Freedman and Adam (1996), for instance, compare students in a public administration program with public sector interns, arguing that the different contexts offer very different learning opportunities. In school, they argue, students are offered opportunities for "facilitated performance" that are "oriented entirely toward the learner and to the learner's learning" (pp. 402-3); instructors, for example, lecture to help students learn, not for purposes of their own learning or accomplishing a task beyond instruction. In workplaces, interns and new employees experience attenuated authentic participation in which "no conscious attention is paid to the learner's learning; all attention is directed to the task at hand and its successful completion" (p. 410). Freedman and Adam illustrate this point with the example of a supervisor sitting and writing together with his intern: this collaborative exercise is not undertaken to instruct the intern but rather to compose a document due to a government official within a very short timeframe. What this collaboration offers the intern, though, is an opportunity for the kind of scaffolded learning predicted by Lave and Wenger's model of legitimate peripheral participation.

Other researchers have similarly stressed the importance, for writers transitioning from school to work, of participating in a community of practice. Bremner (2011) tracks the learning curve of an intern placed in a public relations firm, identifying-through analysis of interviews and the intern's reflective journals—a change in her lexicon, a discernible shift from outsider to insider discourse. The two main factors influencing the intern's learning were, Bremner argues, "the opportunity to learn by doing and getting input from her coworkers" (p. 23)—opportunities not easily available in classroom-based projects. Paré and Le Maistre (2006) place a similar importance on apprenticeship in their longitudinal study of social work students moving from their field placement internship into their first full-time jobs. In an effort to determine what accounts for successful transitions, they conclude that "in settings where induction seemed to us most successful . . . newcomers were transformed from students or recent graduates to practitioners through interaction with a number of veteran practitioners" engaged in the central work of the professional community, rather than specially created instructional experiences (p. 364). They conclude that the "movement toward expertise is collaborative" (p. 364) and end with advice for internship students (get actively involved) and instructors (distribute mentorship); Kohn (2015) draws similar lessons for mentoring workplace writing in the context of university-workplace partnerships.

Other scholars suggest that much of an internship's success in fostering transfer may rest not only on the community of practice, but on the role played by the faculty mentor. Teachers, Bourelle (2014) argues, "need to be the bridge between the classroom and the workplace" (p. 172). Rather than being afraid of having too much contact with the students or industrial supervisor ("for fear of stepping on ... toes" [2012, p. 1185]), instructors should be actively involved in the intern/supervisor connection. More specifically, Bourelle proposes an ambitious two-semester sequence in which students move from a service-learning oriented technical writing course (with a significant client-based project) to an internship focused on similar genres of writing the following semester. Although the increasing levels of fidelity in such a sequence may help "students develop a social consciousness while at the same time learning workplace skills" (Bourelle, 2012, p. 185), designing and sustaining such an integrated course rests on a great deal of organizational work from the instructor who must coordinate the needs and skills of both students and industry partners.

In this way, Bourelle's proposal begins to approximate the integrated vision of internships entailed by the theory of expansive learning developed by Engeström and colleagues (Engeström, 2014; Tuomi-Gröhn & Engeström, 2003). Such an approach focuses on not just individuals but the interfaces between activity systems. For instance, in his study of the advanced education of nurses, Tuomi-Gröhn (2003, 2007) compares different models of internships. The goal of the traditional model is to turn a novice into an expert with the idea that they will be better prepared for the challenges of the workplace. However, some workplaces are "grappling with profound change" and "no one has answers or solutions to the problems encountered" (2003, p. 201); in such cases, the best internships enable "the workplace and the school [to find] a shared object, and a boundary zone activity [is] created . . . which combine[s] two activity systems as collaborative partners" (2007, p. 59). After describing three different nursing internship programs, he concludes that only one meets the criteria of expansive learning. This internship—which resulted in a program implemented in a daycare to better understand the relationship between the development of motor skills and speech—not only influenced the professional growth of the individual intern but also promoted change in the activity systems of both school and work. Such internships appear to be relatively rare (see the earlier explanation of Konkola and colleagues' [2007] research for a second example), but embody a very different, much more integrated, view of the school/workplace relationship navigated by interns.

Several studies have, through their focus on internships, developed analyses that offer critiques of existing theoretical frameworks. For instance, Blythe (2016)—worried that "schools of thought such as activity theory and rhetorical genre theory underestimate the subject, while cognitive theories underestimate context" (p. 65)—works to build a theory of transfer that highlights the subject. Specifically, he supplements Beaufort's (2007) model of writing expertise with a model emphasizing affordances as well as the problem-solving activities of construal, reconciliation, and construction. After using this framework to analyze the experiences of student interns at two American universities, he concludes by highlighting the need for a more "ecological" (p. 65) theory of writing and transfer of learning.

In a similar vein, Baird and Dilger (2017) foreground the importance of dispositions for understanding transfer of learning in writing internships. Building on Beach's (1999/2003) taxonomy of mediational, lateral, collateral, and encompassing transitions, Baird and Dilger offer two case studies that highlight the role played by dispositions related to ease and ownership. Such a framework, they argue, reframes what might otherwise appear as one student's "laziness"; "Under pressure, Mitchell's disposition toward ease cued him to abandon his emerging professional identity and revert to his familiar student identity" (p. 696). A second student, whose "preference for the work side of the work-to-learn experience, intensified by [his] disposition to resist the ease of lateralization and mediation, shaped [his] capstone internship as both collateral and encompassing transitions" (p. 703). Baird and Dilger conclude these case studies of internships with a call for further examinations of the roles of dispositions in transfer.

Finally, Smart and Brown's (2002) study of 24 student interns took a careful, critical view of the role played by the community of practice, leading them to underline its importance but argue that it did not necessarily play out in the ways predicted by Lave and Wenger: namely, the interns in their study "were typically assigned major, rather than ancillary, writing tasks to accomplish, and . . . they were expected to work independently, rather than in an ongoing apprenticing relationship with a mentor" (p. 126). Rather than relying on a close mentor, interns draw on a range of other "cultural artifacts"-such as user manuals, meetings, and software tutorials—to meet expectations. Drawing on their previous learning in the university classroom made it possible for interns to experience "not learning transfer, but rather a transformation of learning that made possible the reinvention of expert practices" (p. 129). Crucial to this transformation of learning was the development of a "knowledgeably skilled identity" (p. 134). In this way, Smart and Brown build on but challenge a prevalent view of internships as an opportunity for extended mentorship, stressing instead the opportunities for distributed cognition embedded in a wide variety of cultural artifacts.

Throughout these studies, though, is a guiding assumption that the authenticity of the workplace helps to facilitate the transfer of learning from school to work and that the development of a professional identity is crucial and may be assisted by learner dispositions.

Adult Learning and the "Reverse Commute"

This final collection of scholarship focuses not on a pedagogy but on a classroom designed for a specific type of student: adult learners. Adult learners are of particular interest for understanding the school/workplace relationship because they disrupt the usual narrative of firstschool-then-work. Navarre Cleary (2013) highlights the importance of thoughtfully engaging with the literacy practices adult learners bring to the university classroom: "To ignore how writing in these other contexts influences how students write for school is to unnecessarily impoverish our understanding of our students, their writing development, and the possibilities for transfer" (p. 661). While Prior, Roozen, and others focused on laminations argue that there is never a simple first-work-then-school trajectory, the work of adult learners clearly and frequently brings work and other life experiences back into the classroom. By looking at how work experiences might inform subsequent classroom studies, the research on adult learners both challenges and affirms many of the other findings summarized in this chapter.

One recurring theme in the scholarship on adult learners is the central role of identity—a theme that also appears in other research as the importance of dispositions and emerging professional identities. Navarre Cleary is particularly interested in the understandings of the writing process that adult learners bring to writing classrooms, understandings that she argues are influenced by academic identity, peer cueing, and analogical reasoning. She develops these ideas in her case studies of two returning students: Tiffany (an African American woman without a degree or formal employment beyond her work as a landlord) and Doppel (a White man in his thirties who worked both as a DJ and at an engineering firm creating designs via AutoCAD):

> Both Tiffany and Doppel bring to school the process approaches that they practice outside of school. Tiffany imagines writing as primarily an off-or-on, freeze-or-flow, binary based upon her experience journaling. Doppel employs a collection of analogies for different elements of his process from which he can draw to construct, and when necessary tweak, his writing process. Both are prompted by peers to transfer process knowledge. Tiffany, however, struggles to internalize this input. She sees academic writing as discrete from who she is, what she does, and what she already knows. In contrast, Doppel's sense of himself as an academic writer increases the likelihood that he will look for connections between his prior and new learning. (p. 678)

Metaphors and identities are intertwined in complex ways, but Navarre Cleary finds that a pattern emerges: students with more experience "making things for which others will pay had more ways to think about the various parts of their writing process" (p. 670) and had more success in their academic writing. Prior experiences and antecedent genre knowledge prove crucial for adult learners reentering the academic classroom.

Gillam's (1991) earlier research also suggests the importance of workplace experience for academic success, highlighting the ways in which access to generative antecedent genres and experiences of writing apprehension may be gendered. (This research, published in 1991, assumes a gender binary.) Male returning adult students were more likely to bring into class their work-related writing experience with documents like memos, sales proposals, and personnel evaluations (40% of men vs. 24% of women); women were more likely to bring experience with personal writing such as letters, diaries, and journals (60% of women vs. 18% of men). As a result, women without workrelated writing experience "may treat transactional or persuasive tasks as though they were expressive ones" (p. 8)—posing a significant challenge for their academic success. Gillam further notes that when she administered a writing apprehension test, there were no statistically significant differences between genders in terms of how many writers felt anxious—but there were clear differences in what provoked that anxiety. Female writers were more likely to express anxiety about being evaluated—a consequence, Gillam speculates, of less experience facing evaluation in the workplace. In short, Gillam suggests that workplace experience may offer an academic advantage unequally available to her students based on gender identities; some readers might even see evidence of "negative transfer" grounded in gender identities.

Michaud's (2011) study of what he calls the "reverse commute" also documents the challenges of facing new literacy contexts with old resources, but he frames it not in terms of gendered access, but as an example of Brandt's (2001) account of the challenges of negotiating accumulating literacy practices-a perspective on transfer that (as indicated in Chapter 5, "Transfer Implications from Sociocultural and Sociohistorical Literacy Studies") highlights the economic forces influencing literacy acquisition and repurposing. Like Navarre Cleary, Michaud focuses on the compositional practices of his focal student, Tony, an Emergency Medical Technician whose aspiration to become an EMS educator will require publication in professional EMS journals. Tony's preferred method of composition was assemblage; "rightclick-steal" (p. 252) served him well putting together a Competency Manual for work and PowerPoint presentations at school, both cases where he could fill in templates. Michaud finds that Tony struggles, however, with tasks that aren't assemblage-both at work (e.g., documenting problematic workers) and school. Assemblage may be "a difficult habit to break" and "a kind of crutch, allowing students to avoid confronting long-standing difficulties with more extensive forms of writing" (p. 255) or in other cases such a "ubiquitous presence in their professional lives" that the shift is difficult. Nevertheless, if Tony wishes to advance in his career as an EMS educator, Michaud argues, he will need to do less assemblage and more "invention and arrangement of extended original prose" (p. 255). The very same literacy practices that have served Tony well in work and school up until now are the practices that may inhibit his ability to adapt and advance, an indication not of Tony's personal abilities or limitations, but of how Tony's accumulating literacy practices are valued in the larger economic systems in which Tony's school and work participate. Understanding these challenges through the lens of Brandt's argument about accumulating literacy practices highlights the ways in which transfer activities—of knowledge and identities, between work and school—are embedded in larger economic systems.

Conclusion: Implications for Pedagogy and Methodology

This chapter has synthesized findings from researchers adopting a range of complementary theoretical frameworks (communities of practice, rhetorical genre theory, and activity theory) as well as explorations of transfer of learning in four different pedagogical contexts: WAW courses, classroom-based interactions with clients (including simulations, client-based projects, and service learning), internships, and adult learning classrooms. As the second half of this chapter has demonstrated, the pedagogical implications of studying the school-towork transition have been foregrounded in the research itself. However, as we conclude this chapter, we can identify two crucial pedagogical questions that wind their way through the scholarship.

First, there is an abiding interest in issues of fidelity: with the right rhetorical fictions (in classroom or virtual simulations) or external partnerships (client-based projects or service learning), can a classroom helpfully approximate the experience of workplace writing and facilitate transfer of learning from school to work? Are school and work *necessarily* worlds apart? Or is such a suggestion (in the words of Prior) "absurd" because individuals experience their lives as "laminated" experiences that inform one another? The scholars represented in this chapter have come to no definitive answer on such questions—but these are questions that each instructor will need to consider carefully as they design courses and assignments.

There is far more consensus on a second pedagogical question: what is the role that genres play in transfer of knowledge and abilities from school to work. The answer? They play an enormous—and enormously complex—role. Written genres help get work done in workplaces: they are sometimes the deliverable and often the tools to produce the deliverable. Working on and talking about writing with more experienced colleagues is a form of legitimate peripheral participation and means of becoming more expert in a workplace. If this is so, instructors might ask themselves a series of questions: what genres might be assigned in the classroom in order to build knowledge and confidence for students moving into subsequent workplaces? And, how might experience with workplace genres inform students' approaches to classroom assignments? In what ways can instructors help students learn to expect that the "same" genre may function in considerably different ways in the context of a classroom and the context of a workplace? And, turning to the issue of identity that recurs throughout this chapter, how do genres work as a site of negotiating identities, especially emergent professional identities?

When we turn to the question of research methods, this body of scholarship raises questions about not only what gets studied but how. To begin with classroom-based research, the existing studies of adult learners have already begun to shift attention from the micro view of workplace writing afforded by most of the research in this chapter, to the macro view offered by Brandt (2014). Writing in workplaces-indeed writing in general—has undergone a profound transformation in the twenty-first century: writing, Brandt argues, has become "a dominant form of labor that is reshaping relationships between writing and reading, and reshaping the character of mass literacy in the process" (p. 18). The labor of writing is valued in complex, even contradictory ways: organizations run on workaday writing, but employee-writers have no legal ownership of or protections for their writing. To be a strong writer can be a means of advancement in a workplace, but often via the process of serving as a ghostwriter for a more powerful, more highly compensated employer. Yet, even as current legal and organizational structures provide no acknowledgement of the influence of writing on the writer herself, Brandt argues that the links between workplace writing and identity formation-what she calls the "residue of writing"-remain. In light of these shifts in the experience of mass literacy, shifts in which "writing seems to be eclipsing reading as the literate experience of consequence" (p. 3), workplace writingespecially studies of workplace writing that look beyond individual experiences to larger social structures, longer sweeps of time, and the role of cultural artifacts-will continue to prove an important site for

researchers wishing to understand the transfer and transformation of writing, community membership, and emerging individual identities.

A second line of research, partially grounded in classrooms, might build on the tradition of work-integrated learning (Bleakney, 2019; HEQCO, 2016). Although relatively unfamiliar to researchers in the United States, there is a well-established tradition of work-integrated learning research in Australia, Canada, and elsewhere. Examples of work-integrated learning include internships, co-ops, field experience, and practicum. Although work-integrated learning research has not often focused on writing (see DePalma et al., 2022, for an important exception), its grounding in activity theory and the situated learning perspective suggests that there might be a productive overlap with writing studies concerns and methods.

A third direction for future research might be to deepen explorations that are based in workplaces. To date, writing studies has produced a handful of superb, workplace-based research. Brandt (2014), for instance, interviewed new, mid-, and late-career employees at a wide range of workplaces, and Beaufort (1999, 2007) closely followed several individuals in their workplaces. But relatively few other scholars have offered such systematic studies of post-graduation workplace writing, when participants are no longer participating in internships or coops connected to university studies. The reasons for this gap must surely include the difficulties of access, particularly given the complicated issues of authority and intellectual property that surround much workplace writing; nevertheless, there remains a need for research that centers on post-graduation workplace experiences. Several projects sponsored by Elon University's Research Seminar on Writing Beyond the University, for instance, have begun such work (Bleakney et al., 2022); the Archive of Workplace Writing Experiences may also prove a valuable resource.

A fourth research agenda might take up questions of writing beyond the school/work binary. Anson (2016), for instance, offers an account of his own "frustrated transfer" (p. 532) as he struggles to write summaries of his son's football team's performance for the local paper. Several lines of systematic inquiry have also begun to emerge from Elon University's Research Seminar on Writing Beyond the University and deserve broader uptake. For instance, Yancey et al. (2022) have begun to explore the recursive relationships among spheres that include not only the classroom and workplace but also self-motivated spheres; civic, community, and political spheres; co-curricular spheres; and internship spheres. Diving further into the realm of self-sponsored writing, Reid et al. (2022) have begun to explore the extent to which the functions of self-sponsored writing might be an interplay of the personal, professional, civic, social, and educational. Both projects highlight the degree to which scholars wishing to understand the relationship between school and work have blinkered themselves to the wide range of writing experiences that might be meaningful and influential outside of those two contexts.

Finally, turning to questions of not just what to study but how to study it, writing studies scholars might turn to the knowledge management scholarship described in Chapter 3. The knowledge management perspective frames transfer of learning as an interpersonal phenomenon, one in which colleagues transfer knowledge amongst individuals or even entire workgroups. Although writing studies has focused, *almost* without exception, on transfer as an intrapersonal experience transpiring within a single individual operating within their social contexts, there are indeed exceptions. As discussed earlier in this chapter, work adopting a cultural historical activity theory perspective has already shifted the unit of analysis away from individual learners. By focusing on divisions of labor and the transformation of activity systems, they encourage scholars to examine larger workplace contexts encompassing groups of individuals learning from one another. With its focus on mediational tools and boundary objects, cultural historical activity theory nudges scholars towards considerations of the distributed cognition central to knowledge management. In these ways and others, studies of workplace writing adopting a cultural historical activity theory offer both an argument for and the methods of moving towards a more interpersonal view of transfer.

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