INTRODUCTION

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Most US colleges and universities require students to complete a first-year writing course (or even two), with the premise that students will apply what they learn there to their writing across the university and beyond. Around the globe, employers assume that applicants bring knowledge about writing for the specific workforce they are entering, having gained that knowledge in secondary and post-secondary studies. In other words, underlying our educational systems is an assumption that students will transfer knowledge—specifically writing knowledge—across critical transitions (e.g., course to course, school to workplace, etc.). Until recently, though, those assumptions were largely untested. A handful of studies (e.g., Anson & Forsberg, 1990; Beaufort, 2007; Bergman & Zepernick, 2007; Clark & Hernandez, 2011; Driscoll, 2011; McCarthy, 1987; Nelms & Dively, 2007; Wardle, 2007) followed localized groups of students navigating writing across specific critical transitions or examined faculty expectations for students' transfer of writing knowledge. *Writing Program Administration*, the journal of the Council of Writing Program Administrators, featured three articles on "concepts of knowledge transference" in 2007, signaling a growing interest in the topic (Pettipiece, Ray & Macauley, 2007, p. 9).

Building on this increased attention to writing transfer, Elon University sponsored a multi-institutional research seminar on Critical Transitions: Writing and the Question of Transfer from 2011 to 2013. As part of the seminar, 45 writing researchers from 28 institutions and five countries participated in multi-institutional research cohorts focused on extending the field's knowledge about writing transfer. The seminar fostered discussions and research about recognizing, identifying enabling practices for, and developing working principles about writing transfer. Seminar participants contributed to the 2012 special issue of *Composition Forum* (edited by seminar participant Elizabeth Wardle), developed the *Elon Statement on Writing Transfer* (excerpted below and included in full in Appendix A), and hosted the Critical Transitions: Writing and the Question of Transfer Conference in June 2013. An additional outcome of the seminar's collective inquiry is this collection.

Like much of the discipline's transfer research, the studies that follow draw on learning and transfer theories that examine intersections among the nature of knowledge, learners and learners' processes, and the contexts or situations in which transfer of learning might occur (see Figure 1). Focused on the intersection
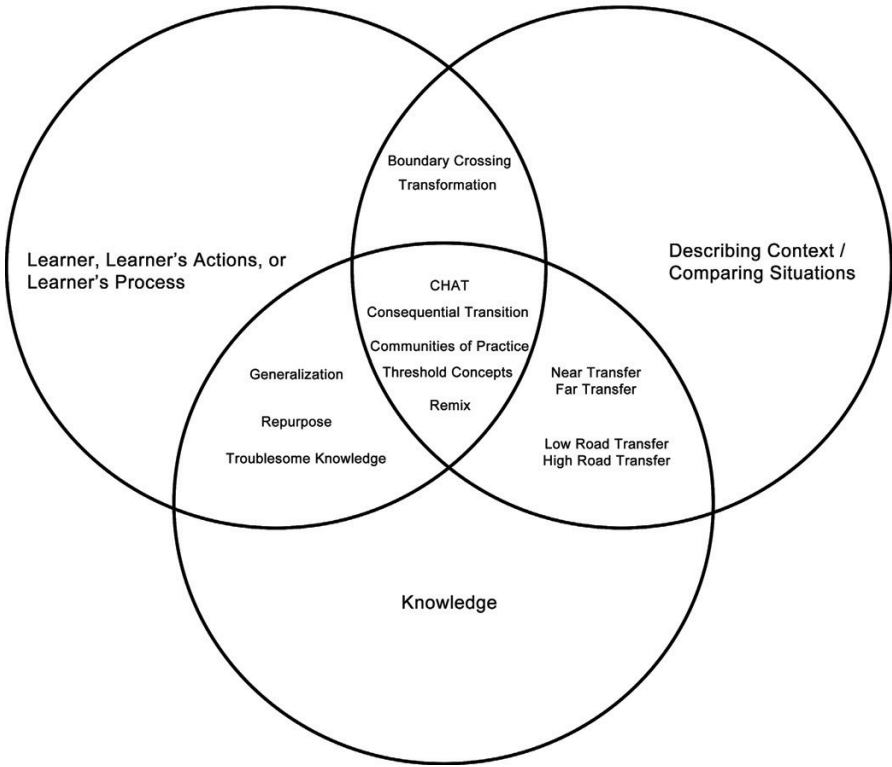
What does the concept/idea emphasize?

Boundary Crossing
Transformation

Learner, Learner's Actions, or
Learner's Process

Describing Context /
Comparing Situations

CHAT
Consequential Transition
Communities of Practice
Generalization   Threshold Concepts   Near Transfer
                                              Far Transfer
                       Remix
Repurpose
                                              Low Road Transfer
Troublesome Knowledge   High Road Transfer

Knowledge

Figure 1. What the learning and transfer theories emphasize.

of knowledge and context, for instance, David Perkins and Gavriel Salomon introduced two complementary sets of terms that now permeate many writing transfer studies: near and far transfer, and high road and low road transfer. Perkins and Salomon write that "near transfer occurs when knowledge or skill is used in situations very like the initial context of learning" while "far transfer occurs when people make connections to contexts that intuitively seem vastly different from the context of learning" (1992, p. 202; see also Salomon & Perkins, 1989). Focusing on the mechanisms that facilitate transfer of learning even when the contexts "seem vastly different," Perkins and Salomon introduced the low road transfer model to describe similarities between a new context and prior situations triggering extensively practiced, or nearly automatic, skills. In contrast, high road transfer requires deliberate, mindful abstraction of principles to apply them in new situations (Perkins & Salomon, 1988, 1992; Salomon & Perkins, 1989).

Building on activity systems theory, Terttu Tuomi-Gröhn and Yrjo Engeström offer the concept of boundary-crossing, pointing to an intersection between the learner and context. Tuomi-Gröhn and Engeström explain that boundary-crossing "involves encountering difference, entering into territory in which we are unfamiliar and, to some significant extent therefore, unqualified. In the face of such obstacles, boundary-crossing seems to require significant cognitive retooling" (2003, p. 4). Boundary-crossers employ "boundary objects," tools that develop at the intersection of communities/activity systems to facilitate interaction between and across systems. Paula Rosinski (Chapter 9) picks up this concept as she explores how students' self-sponsored digital writing influences their rhetorical choices in academic writing.

Working at the intersection of knowledge and learner, King Beach examines generalization as knowledge propagation, suggesting that generalization is informed by social organization and acknowledges change by both the individual and the organization. Beach's learning theory moves to the intersection of context, learner, and knowledge with Beach's exploration of consequential transitions. Beach explains transition as "the concept we use to understand how knowledge is generalized, or propagated, across social space and time. A transition is *consequential* when it is consciously reflected on, struggled with, and shifts the individual's sense of self or social position. Thus consequential transitions link identity with knowledge propagation" (Beach, 2003, p. 42). In this volume, Donna Qualley (Chapter 3) examines graduate teaching instructors' consequential transitions as they learn to become teachers of writing. Elizabeth Wardle and Nicolette Mercer Clement (Chapter 6) also illustrate the notion of consequential transitions and consider how Nicolette navigated the double bind presented during her own consequential transition from a college composition course to subsequent writing situations across the university.

Like the theory of consequential transitions, communities of practice and threshold concepts also theorize practices at the intersection of learner, context, and knowledge. Etienne Wenger's and his colleagues' development of communities of practice theory offers writing studies scholars a way to examine the shared values, goals, and interests within communities (see, for instance, Wenger, McDermott & Snyder, 2002). As novices work to advance their expertise within a community of practice, they learn from others in the community—and part of that identity development involves learning how to learn within the community. Community membership is fluid, though, so new members with different levels of expertise may enter the community while members looking for new challenges or seeking to meet different goals may move out. Christiane Donahue (Chapter 4) invokes communities of practice not only as a way to understand students' knowledge transformation but also as a reminder that international scholars are

contributing to the community of practice developing around writing transfer research—and bringing alternate terms and theories to the conversation.

Also at the epicenter of learner, context, and knowledge, Jan (Erik) Meyer and Ray Land introduced the theory of threshold concepts, which informs several of the writing transfer studies in this collection and elsewhere. Building on David Perkins' notion of troublesome knowledge, Meyer and Land (2006a) challenge educators to identify concepts central to epistemological participation in disciplines. Threshold concepts are transformative, troublesome, and irreversible; they may challenge a learner's prior knowledge, but once a learner grasps a threshold concept, the concept changes the learner's understanding of the discipline in ways that are likely irreversible. Threshold concepts are discursive. They also may be bounded by situational or disciplinary cues, and they may be integrative, enabling a learner to bring together previously disparate knowledge. Finally, threshold concepts involve liminality; learners may hover in a threshold zone before fully grasping the concept and moving beyond the "conceptual gateway" (Meyer & Land, 2006a, 2006b). Linda Adler-Kassner, Irene Clark, Liane Robertson, Kara Taczak, and Kathleen Blake Yancey (Chapter 1) explore threshold concepts as a framework for designing for and understanding transfer of writing knowledge across contexts, and Gita DasBender (Chapter 10) uses threshold concepts theory to examine the liminal space second language writer's occupy as they attempt to transfer between their first language and second language.

Additional learning and transfer theories (e.g., James Paul Gee's concepts of learning and acquisition, Urie Bronfenbrenner's Bioecological Model of Human Development, Pierre Bourdieu's notion of *habitus*, etc.) are introduced in the *Elon Statement on Writing Transfer* and within the individual chapters. Although each theory shifts the perspective for analysis slightly, they collectively enable the discipline to develop a richer understanding of writing transfer, as each theory adds a new overlay to our understanding of the rhetorical situations and activity systems in which writers compose, the writing knowledge required for those situations and their varied audiences and purposes, and the activities of the learners trying to repurpose and transform writing knowledge in order to communicate successfully within and across contextual boundaries.

THE ELON STATEMENT ON WRITING TRANSFER—EXCERPT

These transfer and learning theories inform the *Elon Statement on Writing Transfer*, excerpted here, and the chapters in this collection. ERS participants brainstormed extensive lists of principles and enabling practices about writing trans-

fer, examined which were supported by existing and in-progress research, and then indicated their degree of confidence in each working principle. As a collaboratively authored document, the *Elon Statement* focuses on working principles and enabling practices that the seminar participants collectively have high-confidence in based on findings from the research seminar's multi-institutional inquiry projects and the field's prior transfer scholarship. Additional principles in which participants had moderate- to high-confidence but that would benefit from additional research are identified in the *Elon Statement* as working principles in development. The chapters in this collection provide evidence for and examples of the working principles, enabling practices, and principles in development described in the statement.

WORKING PRINCIPLES ABOUT WRITING TRANSFER

Drawing on their own research and that of others, ERS participants have identified a number of principles in which they have high confidence—that is, principles that emerge out of empirical studies focusing on writing transfer. These principles extend from the idea that transfer does occur, contrary to suggestions reflected in some prior research. Writers consistently draw on prior knowledge in order to navigate within and among various contexts for writing and learning. Sometimes the rhetorical challenge requires bringing what we know to conscious attention in order to think about similarities and differences between what we know and have done and what we must do now. Sometimes we must reflect, repurpose, and generalize what we bring to bear. Sometimes we must do even more than repurpose and must engage in consequential transitions (Beach, 2003; see above). And usually, even while we are bringing existing knowledge and experience to bear on the new situation, we must learn anew as part of the process of understanding, adaptation, and enculturation.

Nevertheless, while we know that writing transfer both occurs and is necessary for successful writing, prior research highlights the challenges of teaching to facilitate transfer. Students typically do not expect to be able to apply what they are learning in traditional first-year writing courses to other contexts (e.g., Bergmann & Zepernick, 2007; Driscoll, 2011), and when they do try to transfer new skills and knowledge from one academic setting to another, they often encounter roadblocks (e.g., Nelms & Dively, 2007; Nowacek, 2011). Furthermore, some curricular designs unintentionally impede transfer (e.g., Wardle, 2009).

As teachers, then, we must consider what sorts of rhetorical challenges students encounter in our classes and contexts beyond and how to best help students navigate those challenges. Research suggests that there are things that teachers can do to afford learning in these moments of challenge. In other words, it is

possible to "teach for transfer" (as Perkins and Salomon put it), and the discipline is learning more about what writing transfer entails:

- Writing transfer is the phenomenon in which new and unfamiliar writing tasks are approached through the application, remixing, or integration of previous knowledge, skills, strategies, and dispositions. (See, for instance, the chapters by Adler-Kassner, Clark, Robertson, Taczak & Yancey; Qualley; and Wardle & Mercer Clement.)
- Any social context provides affordances and constraints that impact use of prior knowledge, skills, strategies, and dispositions, and writing transfer successes and challenges cannot be understood outside of learners' social-cultural spaces. (See, for instance, the chapters by Blythe; Hayes, Ferris & Whithaus; and Wardle & Mercer Clement)
- Prior knowledge is a complex construct that can benefit or hinder writing transfer. Yet understanding and exploring that complexity is central to investigating transfer. (See the chapters by Adler-Kassner et al., Qualley, and DasBender.)
- Individual dispositions and individual identity play key roles in transfer. (See, for instance, the chapter by Gorzelsky, Driscoll, Paszek, Jones & Hayes.)
- Individuals may engage in both routinized and transformative (adaptive, integrated, repurposed, expansive) forms of transfer when they draw on or utilize prior knowledge and learning, whether crossing concurrent contexts or sequential contexts. (See, for instance, the chapter by Qualley.)
- Successful writing transfer occurs when a writer can transform rhetorical knowledge and rhetorical awareness into performance. Students facing a new and difficult rhetorical task draw on previous knowledge and strategies, and when they do that, they must transform or re-purpose that prior knowledge, if only slightly. (See, for instance, the chapters by Blythe, Qualley, and Rosinski.)
- Students' meta-awareness often plays a key role in transfer, and reflective writing promotes preparation for transfer and transfer-focused thinking. (See the chapters by Adler-Kassner et al. and Gorzelsky et al.)
- The importance of meta-cognition of available identities, situational awareness, audience awareness, etc., become even more critical in writing transfer between languages because of the need to negotiate language-based differences and to develop awareness about the ways language operates in written communication in each language. (See the chapters by DasBender and Cozart et al.)

Enabling Practices

Practices that promote writing transfer—and which are explored in multiple chapters in this collection and in research seminar participants' other recent publications (e.g., *Writing across Contexts: Transfer, Composition, and Sites of Writing* by Yancey, Robertson, and Taczak, 2014)—include:

- Constructing writing curricula and classes that focus on study of and practice with concepts that enable students to analyze expectations for writing and learning within specific contexts. These include rhetorically-based concepts (such as genre, purpose, and audience);

- Asking students to engage in activities that foster the development of metacognitive awareness, including asking good questions about writing situations and developing heuristics for analyzing unfamiliar writing situations; and

- Explicitly modeling transfer-focused thinking and the application of metacognitive awareness as a conscious and explicit part of a process of learning.

ERS participants have investigated both "Teaching for Transfer" and "Writing about Writing" curricula in multi-institutional studies. Because these types of curricular approaches forefront rhetorical knowledge, terms, and concepts that students will need to apply in future contexts, they equip students with tools and strategies for successful boundary crossing. These approaches typically also build in reiterative opportunities for developing metacognitive awareness. Although these curricula often are implemented in first-year writing contexts, courses university-wide can include reflection activities about both generalizable and discipline-specific writing strategies.

Recognizing and Studying Transfer: Sites and Methods

Cross-institutional, cross-disciplinary, and cross-cultural collaboration enriches the discussion about writing transfer and allows new perspectives to become visible. Even if multi-institutional research is not feasible for a specific writing transfer study, scholars should pursue both new and replication studies in varied contexts and routinely revisit how new inquiries intersect with prior and concurrent studies (across global contexts, as Donahue's chapter emphasizes).

Both in case studies of individuals or contexts and in larger data samples, writing transfer studies use a variety of qualitative and quantitative methods to identify evidence of and measure transfer, including surveys, focus groups, interviews, classroom observations, text analysis, discourse analysis, composing-

aloud and think-aloud protocols, group discussion logs, and analysis of students' course work and faculty comments. While students often are the primary participants in transfer studies, researchers also interact with and collect data from teachers and community partners, and new studies are beginning to investigate transfer in experienced writers (e.g., Anson, 2016; see also Smart, 2000). Most transfer studies are short-term (one or two terms), but additional longitudinal studies and studies that examine both writers' academic and non-academic activity systems could extend the field's understanding of writing transfer.

ERS studies and other contemporary work in writing transfer reiterate the value of using mixed methods across multiple contexts to achieve a "scalable" understanding of writing transfer—enabling teacher-scholars both to focus in detail on specific communities of practice and activity systems *and* to "zoom out" to examine working principles of writing transfer that apply across multiple contexts. For this reason, both short-term and longitudinal studies will enrich disciplinary understandings of transfer, particularly as scholars examine learners' development as writers, not merely their transitions from one context to another. Adding student voices as participants, or even as co-inquirers (as in Wardle and Mercer Clement's chapter), facilitates this more holistic examination of learners' development, boundary-crossing, remixing, and integration.

WORKING PRINCIPLES IN DEVELOPMENT

In addition to the high-confidence working principles discussed above, ERS participants identified a number of working principles that remain in development. ERS participants have moderate to high confidence in these in-development principles, but they merit further research.

- With explicit rhetorical education, students are more likely to transform rhetorical awareness into performance.
- Helping students develop strategies and tools to think about how writing functions in communities can potentially prepare them to draw effectively on prior knowledge when they encounter writing in new settings, whether writing for a major, writing in a workplace, or writing for extracurricular activities.
- Some dispositions seem to better afford engaged rhetorical problem-solving. We are only starting to explore what such dispositions might be, so pedagogy that promotes transfer needs to be attentive to dispositions research.
- Some physical and digital space designs afford learning and transfer better than others.

- The transfer of rhetorical knowledge and strategies between self-sponsored and academic writing can be encouraged by designing academic writing opportunities with authentic audiences and purposes and by asking students to engage in meta-cognition.

THE ELON RESEARCH SEMINAR STUDIES

In this collection, the authors—all Elon Research Seminar participants—build on prior learning and transfer theories to ask *what* writing knowledge should transfer (Adler-Kassner et al., Chapter 1), *how we might recognize* that transfer (Blythe, Chapter 2; Qualley, Chapter 3), and what the *significance* is—from a global perspective—of understanding knowledge transformation related to writing (Donahue, Chapter 4). In part two of the collection, authors examine strategies for supporting writers' transfer at key critical transitions, including transitions from high-school to college (McManigell Grijalva, Chapter 5), from first-year writing to writing in the major and in the disciplines (Hayes et al., Chapter 7; Gorzelsky et al., Chapter 8; Wardle and Mercer Clement, Chapter 6); between self-sponsored and academic writing (Rosinski, Chapter 9); and between languages (Cozart et al., Chapter 11; DasBender, Chapter 10). Finally, the collection concludes with an afterword offering next steps in studying and designing for writing transfer.

Two themes reappear throughout the collection. First, language matters, and the varied terms introduced in the *Elon Statement on Writing Transfer* and embedded in the learning and transfer theories underlying these studies all carry baggage. In this collection, as in the *Elon Statement*, we use "transfer" as an umbrella term, connecting writing transfer studies to the other multidisciplinary inquiries about transfer of learning. Nevertheless, the limitations of the term necessitate supplementing it with more descriptive language: generalization, transitions, transformations, boundary-crossing, remixing, and integration, among others. Defining the terms we use (see the Glossary at the end of this collection) *and* actively looking for studies that use alternate terms in similar ways remains imperative if writing studies is to have a true sense of the scope and work of writing transfer research. Furthermore, acknowledging—even embracing—the complex and varied existing vocabulary enables scholars to focus on understanding and designing for writing transfer, rather than getting bogged down in what we call it.

Second, *faculty can teach for writing transfer*. The studies in this collection demonstrate that the assumptions underlying US writing curricula and global hiring expectations can be substantiated if:

- Colleges and universities construct writing curricula that focus on the study and practice of writing knowledge, including rhetorically-based concepts,
- Faculty ask students to engage in and develop metacognitive practices about writing and writing situations, and
- Faculty explicitly model transfer-focused thinking.

The chapters that follow offer critical insights into identifying transferable writing knowledge, exploring writing transfer across contexts, and supporting students' application and repurposing of prior writing knowledge as they learn practices and dispositions that foster future writing transfer.

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