## GLOSSARY

Activity systems are groups of people (e.g., communities of practice) who share a common object of attention, or problem space, and motive over time. Cultural-historic activity theory posits that the human interactions within activity systems are tool-mediated, shaped by shared community rules, and fluid. Membership changes as people join the community or leave to pursue other motives. Individuals may contribute to and move among multiple activity systems—university classrooms, workplaces, family units, disciplinary communities, and so forth—necessitating boundary crossing and negotiation of sometimes conflicting motives. See Chapter 5 (McManigell Grijalva) and Chapter 6 (Wardle & Mercer Clement).

**Assemblage** involves grafting new knowledge onto prior knowledge without fully integrating the new knowledge. The new knowledge becomes an "add-on," and the prior knowledge remains unchanged. See Chapter 3 (Qualley).

**Backward transfer** refers to new knowledge/learning influencing prior knowledge. It may occur more often when the new knowledge builds on a foundation of prior knowledge that is still developing. See Chapter 3 (Qualley).

**Backward-reaching transfer** entails examining prior knowledge for ideas or concepts that will help a learner understand or make sense of new knowledge. It represents a break in forward momentum, as the exigence for backward-reaching transfer is an encounter with a problem, compelling the learner to pause, reverse direction, and consult previous knowledge or experience before looking again to its application in the new context. See Chapter 3 (Qualley).

**Boundary-crossing** entails using "boundary objects," tools that develop at the intersections of discrete contexts or activity systems to facilitate interaction between and across these systems. Because boundary-crossing involves grappling with differences among systems and entering unfamiliar community spaces, boundary-crossing is cognitively intensive. See Terttu Tuomi-Gröhn and Yrjö Engeström (2003), and this collection's introduction (Moore & Anson), Chapter 3 (Qualley), and Chapter 4 (Donahue).

Bridging activities facilitate high-road transfer.

**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. See Chapter 1 (Adler-Kassner, Clark, Robertson, Taczak & Yancey) for a discussion connecting Communities of Practice and Threshold Concepts.

**Consequential transitions** may be lateral (unidirectional from a preparatory activity to a related, developmentally advanced activity), collateral (multi-directional between concurrent activities), encompassing (within social activities that are undergoing change), or meditational (mediating developmental progress in simulations of future activities). 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" (2003, p. 42). See Chapter 3 (Qualley) and Chapter 6 (Wardle & Clement Mercer).

**Far transfer** refers to carrying knowledge across different contexts that have little, if any, overlap (e.g., applying chess strategies to a political campaign).

**Forward-reaching transfer** is a form of high-road transfer in which a learner looks forward to a new context and anticipates how prior knowledge and practice might be relevant to solving a problem or developing knowledge in the future context. See Chapter 3 (Qualley).

**Generalization** is the application of prior knowledge to a new situation or context. As knowledge propagation, generalization is informed by social organization and acknowledges change by both the individual and the organization. See Chapter 4 (Donahue).

**Genre awareness** is metacognitive understanding of genre and the roles genres play within communities of practice. A rhetorical view of genre examines genres not solely based on their forms or characteristics, but also in relation to their rhetorically situated functions (with attention to audience, purpose, and rhetorical context). See Chapter 1 (Adler-Kassner et al.).

**High-road transfer** requires the learner's mindful abstraction to identify relevant prior knowledge and apply it in the new context.

Hugging activities facilitate low-road transfer.

**Integration**, alternately considered a form of high-road transfer or the opposite end of a continuum with transfer, entails (re)combining new and prior knowledge in ways that shape or change both. New knowledge is not merely spliced onto prior knowledge; the two intermingle, forming a new, cohesive knowledge base. As a result, Nowacek (2011) identifies successful integration as a metacognitive activity.

**Low-road transfer** occurs when something is practiced in a variety of contexts until it becomes second nature and is automatically triggered when a new context calls for use of the knowledge, skill, or strategy. **Metacognition**, in essence, is thinking about thinking. While cognition involves thinking to perform a task, metacognition entails reflection on that thinking, its efficacy, and/or its outcomes. See Chapter 8 (Gorzelsky, Driscoll, Paszek, Jones & Hayes).

**Metacognitive awareness** reflects conscious monitoring and use of metacognitive strategies.

**Near transfer** refers to carrying prior knowledge or skill across similar contexts (e.g., driving a truck after driving a car).

**Prior Knowledge** includes prior dispositions, attitudes, and understandings. Bransford et al. note in *How People Learn* that all "new learning involves transfer based on previous learning" (2000, p. 53). Prior knowledge may be a good fit for new learning, it may be at odds with new learning, or it may prompt dissonance between prior and current learning contexts. See Chapter 1 (Adler-Kassner et al.).

**Remix** entails taking elements from both prior knowledge and new knowledge and integrating them to create new understanding or practice. See Robertson et al. (2012).

**Repurpose** refers to using prior knowledge across different contexts, perhaps with new and varied goals for or applications of that knowledge.

**Retrospective understanding** "directs our attention to the transition process itself and illuminates the roles that dispositions, motivations, and meta-awareness play in transformative forms of transfer and in the development and expansion of expertise" (Chapter 3, Qualley).

**Systematic reflection** (or **Reflection**) "prompts writers to recall, reframe, and relocate their writing knowledge and practices" (Chapter 1, Adler-Kassner et al.).

**Teaching for transfer** refers to curricular designs with the explicit goal of fostering transfer. Course activities and assignments strive not only to teach content, but also to teach strategies for and facilitate practice in examining how the course knowledge and practices might apply to concurrent and future contexts.

**Threshold Concepts** are central to epistemological participation in disciplines. Jan (Erik) Meyer and Ray Land, building on David Perkins' notion of *troublesome knowledge*, challenge educators to identify concepts that function as a "portal, opening up a new and previously inaccessible way of thinking about something" (2006, p. 3). 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). Once educators identify threshold concepts that are central to meaning making in their fields, they can prioritize teaching these concepts, in turn increasing the likelihood that students will carry an understanding of these core concepts into future coursework and contexts. See Chapter 1 (Adler-Kassner et al.) for a discussion connecting Communities of Practice and Threshold Concepts.

**Transfer** refers to the ability to repurpose or transform prior knowledge for a new context. In some contexts, transfer may involve using prior knowledge in a routinized way, while in other contexts, successful transfer may require mindful abstraction of prior knowledge, perhaps remixed or integrated with new knowledge. For many scholars, transfer functions as an umbrella term, encompassing an array of theories about the phenomenon.

**Translation** refers to transforming prior knowledge for new contexts. Drawing from linguistics, social anthropology, political science, sociology, and ethnomethodology, translation emphasizes the social nature of knowledge construction and transformation. Much like linguistic translation must be cognizant of the cultural constructions of language, knowledge translation is attentive to new contextual cues. See Chapter 4 (Donahue).

**Troublesome knowledge** is knowledge that requires a paradigmatic shift in previous thinking. While that shift—or troublesomeness—may be problematic and disruptive, it also can be generative, prompting new ways of thinking or new reconciliations of prior and new knowledge. See Chapter 1 (Adler Kassner et al.) and Chapter 3 (Qualley). See Chapter 4 (Donahue) for a distinction between troublesome knowledge and troubling knowledge.

Writing transfer refers to a writer's ability to repurpose or transform prior knowledge about writing for a new audience, purpose, and context. In writing studies, it often functions as an umbrella term, connecting the field's transfer studies to other transfer research in learning studies, educational psychology, and related fields.