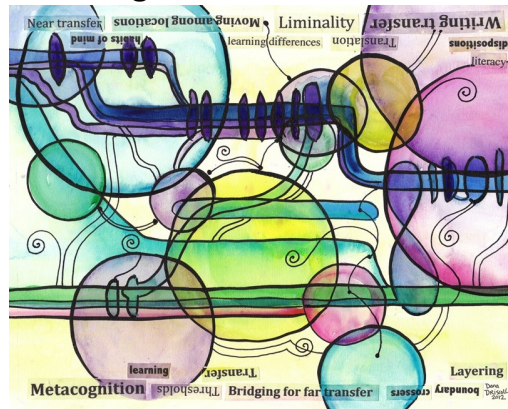


Transfer of Writing Skills & Knowledge: Making the Invisible Visible



Definitions of Transfer:

- when learning in one context enhances (or undermines) a related performance in another context. (Perkins and Salomon, 1992)
- the ability to extend what has been learned in one context to new contexts (Brandsford, Brown, Cocking, 1999)
- the process of using knowledge or skills acquired in one context in a new or varied context. (Alexander and Murphy, 1992)

Wardle (2007) also reviews classic conceptions of transfer:

- Task-centered -- knowledge required to complete a task
- Individual -- “learned intelligent behavior” and “disposition” (Tuomi-Grohn and Engestrom 24).
- Contextual --
 - Situated: “patterns of participatory processes across situations” (Tuomi-Grohn and Engestrom 25).
 - Sociocultural: “relations between persons and activities” Activity-based: “...the individual’s learning is understandable only understand the learning of the activity system” (30). “learning” or “generalization” (Beach 40)
 - Activity-based perspectives approach transfer in structural and systemic turns. “David Guile and Michael Young adopt this same language, arguing that we must “reformulate transfer as a process of transition between activity systems” (77).

Transfer depends on metacognition...

Effective learning depends on thinking beyond the particular situation in which something was learned by a “process of reflecting on and directing one’s own thinking” (National Research Council, 2001, p. 78).

... and Motivation

Effective learning depends on establishing both **value** and **expectancies**.

Value: attainment vs. intrinsic vs. instrumental

Expectancies: outcome and efficacy (Ambrose et. al., 2012)

All writers actively make use of prior knowledge as they respond to a new writing task.

- Point of departure – students’ attitudes about writing and about themselves as writers; as students have found themselves represented as writers by others through external benchmarks like grades and test scores.
- Absence of prior knowledge – common absences of prior knowledge in two areas for college student writers: key writing concepts and non-fiction texts that serve as models (Yancey, Robertson, & Taczak, 2014).
- Students make use of the prior knowledge they do have in three ways:
 - *Assemblage*: drawing on both knowledge and practice and adding limited number of new key concepts to critical knowledge base; grafting new composing knowledge in the form of isolated bits onto earlier understandings of composition.
 - *Remix*: reworking and integrating prior knowledge and practice with new knowledge as a learner addresses a new task; integrating prior and new composing knowledge.
 - *Critical Incidents*: creating new knowledge and practices as a learner encounters a failed effort to address a new task that prompts critical ways of thinking about what writing is and how to do it; encountering an obstacle that forces/helps them re-theorize writing in general and their own agency as writers in particular.

Prior knowledge can function in three ways:

1. An individual’s prior knowledge can match the demands of a new task;

2. An individual's prior knowledge might be a bad match;
3. An individual's prior knowledge might be at odds with a given situation.

The assumption in many situations is that prior knowledge and motivation can get us to, and through, a new learning situation in a process of accretion. But this is not often the case. Our prior knowledge is limited in application or, perhaps, just wrong. We have to see things in a new way.

Writing is different in different disciplines. To start to think about these differences consider these three questions:

1. What are the questions/problems the discipline takes up?
2. What kinds of evidence count in the discipline?
3. What are the genres the discipline calls on to make knowledge?

Types of Transfer

- *Positive transfer* - when learning in one context enhances a related performance in another context; previous learning facilitates later learning; performance is improved.
- *Negative transfer* - when learning in one context undermines a related performance in another context; previous learning interferes with later learning; performance interference.
- *Near transfer* - transfer between very similar but not identical contexts.
- *Far transfer* - transfer between contexts that appear to be remote and alien to one another; applying learning to situations that are quite dissimilar to the original learning.
- *Low-road transfer* (a.k.a. reflexive transfer) - the triggering of well- practiced routines by stimulus conditions similar to those in the learning context; knowledge is triggered by something similar in a different context.
- *High-road transfer* (a.k.a. mindful transfer) - deliberate and effortful abstraction and search for connections; knowledge is abstracted and applied to another context.
- *Forward-reaching transfer* (a form of "high road" transfer) – learn something and abstracts it in preparation for application elsewhere.
- *Backward-reaching transfer* (a form of "high road" transfer) – in a problem situation, a learner abstracts key characteristics from the situation and reaches backward into her experience for matches.

Strategies to maximize transfer include

- Hugging – using approximations exploits low-road transfer; instruction directly engages learner in approximations to the desired performance.
 - Simulations, role-playing, “apprenticeships”, mock tests labs...
- Bridging – using abstractions to make connections and exploit high-road transfer; instruction encourages the making of abstractions, searches for possible connections, mindfulness, and metacognition
 - Project-based, analogies and metaphors, articulating the principle using multiple learning settings, teaching problem solving and creating thinking...

Instruction that incorporates the realistic experiential character of hugging *and* the thoughtful analytic character of bridging seems most likely to yield transfer.

Creating conditions for transfer may involve

- Thorough and diverse practice
- Explicit abstraction
- Active self-monitoring
- Arouse mindfulness and alertness
- Use metaphors or analogies

Why Might Transfer Fail?

- The student did not learn what he or she was supposed to learn initially. A few investigators admitted being caught off guard when this explanation unfolded. The point - students can't transfer what they have not learned.
- The student's initial learning was deep and thorough but instruction did not delve into when that learning might be used, applied etc.
- The initial learning occurred in a single context.
- The transfer that one hoped for required more than a transfer of prior learning; it required genuine creativity.

- The focus of instruction involved knowledge that was fundamentally "inert," "passive," "local," or "context bound." The material that was so peculiar to the initial learning that it really does not transfer, at least to the novel task or problem that confronts the student. (Perkins and Salomon, 1988)
- The similarities between the initial learning and the novel task were barely discernible. The transfer was too "far" removed from the initial learning or the perceptions of students. Sometimes, "learners do not see that two or more situations or conditions are similar." (Simons, 1999)
- The investigator or instructor looked for the transfer too quickly. This explanation emerges from the proposition that transfer "enhances" learning i.e. narrows the time that it takes to complete/solve a novel and subsequent task or problem.
- The efforts to promote transfer were not explicit, systematic, or persistent.
- The culture of schooling taught students that there is only one legitimate way to solve a class of problems. (Hatano and Greeno, 1999)
- Traditional conceptualizations of transfer are "impoverished." Learning involves more than a "deployment" of an initial learning. (Carragher and Schliemann, 2002) In other words, learning does not carry over intact or directly from one situation to another. The initial learning has to be adapted (assimilated, accommodated) before the novel problem can be solved.
- The transfer of knowledge cannot occur because knowledge cannot be decontextualized (Lave, 1988).