

The Transfer of Composition Knowledge

The Problem: Writing assessments tell us that students learn much that is taught in composition courses and improve their writing in these courses. BUT research tells us that these same students typically do not apply what they learn in composition courses to non-composition course writing situations (e.g., writing for other courses; writing in their jobs). An important aspect of the problem of knowledge transfer generally has been the widespread, implicit assumption that students will transfer what they learn automatically. If they can't transfer it, they haven't learned it. In fact, many have, but they haven't learned when or how to apply it, because we humans tend to internalize knowledge as "local" knowledge—that is, applicable within the context in which it was acquire but not much beyond that.

Features of Learning:

1. *Durability* = how long the knowledge remains in effect
2. *Application* = the use of knowledge in the setting in which that knowledge was acquired
3. *Transfer* = the ability to apply knowledge acquired in one setting to the accomplishment of tasks in a different setting

EXAMPLES (from D.N. Perkins & Gavriel Salomon's "Teaching for Transfer," *Educational Leadership* 46.1 [Sept. 1988]: 22):

- Facing a move across town and concerned with economy, you rent a small truck to transport your worldly possessions. You have never driven a truck before and wonder whether you can manage it. However, when you pick the truck up from the rental agency, you find yourself pleased and surprised. Driving the truck is an experience unfamiliar, yet familiar. You guide the vehicle through the city traffic with caution, yet growing confidence, only hoping that you will not have to parallel park it.
 - The following line of poetry from Shakespeare also shows transfer: "Summer's lease hath all too short a date." Regretting the decline of summer in his Sonnet 18, Shakespeare compares it to, of all things, a lease. The world of landlords and lawyers falls into startling juxtaposition with the world of dazzling days, cumulus clouds, and warm breezes.
4. *Consistency* = how often the knowledge is applied when contexts resembling the one in which the knowledge was acquired are encountered

What We Know about Knowledge Transfer:

1. There exist two kinds of transfer mechanisms:
 - 1) **Low road transfer:** through "the automatic triggering of well-practiced routines in circumstances where there is considerable perceptual similarity to the original learning context" (Perkins and Salomon 25). EXAMPLE: learning to drive a car prepares you for driving a truck. Driving a truck is similar to driving a car.

NOTE: Low road transfer typically involves “near transfer”—that is, the transfer of knowledge across contexts that are not perceived as being very distant from each other.

- 2) **High road transfer:** the “deliberate, mindful abstraction of skill or knowledge from one context for application in another” (Perkins and Salomon 25). EXAMPLE: Shakespeare’s drawing on legal and real estate knowledge for use in conjunction with his description of summer. No perceptual similarity exists in that metaphorical usage.

2 kinds of high road transfer:

- **Forward reaching:** you abstract something learned in preparation for applications in other contexts. That is, as you are acquiring knowledge, you are reflecting on how it might apply in future contexts.
- **Backward reaching:** you reach back into your experience for knowledge you’ve acquired that will help you solve a problem or address an issue.

NOTE: High road transfer can be used for “near transfer,” but it is absolutely necessary for “far transfer”—that is, the transfer of knowledge across contexts that seem distant from each other.

2. Three processes control the transfer of any knowledge from one situation to another:

- 1) **Evaluation** = ongoing assessments of knowledge or understanding, resources available, tasks and subtasks, and goals.
- 2) **Planning** = purposeful selection of strategies for specific tasks.
- 3) **Regulation** = monitoring of progress toward goals and revision of strategies to accomplish those goals.

NOTE: These processes exist whether transfer is low road or high road. In low road transfer, the processes occur *automatically*—that is, at a lower level than fully conscious awareness associated with reflection.

3. As we can see from the processes listed in #s 1 and 2, **metacognition** or **mindfulness** is a crucial factor in high road knowledge transfer.

Metacognition or mindfulness = a heightened awareness of the decisions one is making and the ability to think about and evaluate and revise one’s own thinking.

Perkins and Salomon (“Are Cognitive Skills Context-Bound?” *Educational Researcher* 18.1 (1989: 16-25.) suggest that mindfulness can be defined as the following:

- a. The ability to derive abstract general principles from a specific situation such that these abstract principles can be applied to the new situation;
- b. “[A] sort of executive monitoring function of the mind watching itself at work and deciding: What am I doing now? Is it getting me anywhere? What else could I be doing instead?” (Anne Beaufort, *Writing in the Real World: Making the Transition from School to Work*. NY: Teachers College P, 1999. 186.).

Metacognition or mindfulness, then, involves 2 intertwined features:

- 1) heightened awareness; and
 - 2) reflexivity (self-reflection).
4. The ability to perceive *contextual cues* is crucial to knowledge transfer. Contextual cues = aspects or perceptions within a context / situation / setting that stimulate either high road reflection or low road automatic application of learning from another context / situation / setting.

Global Contextual Cues in Composition:

- ❖ **Purpose:** the goals of the writing, including those explicitly stated or featured in the text (e.g., argumentative claims); those implicitly derivable from the text; and those “hidden” or held by the writer but which are not meant to be revealed to the reader.
- ❖ **Audience:** the person or persons to whom the written text is meant for. Audiences may include those addressed but also those not addressed but whom the writer knows will read the text and whom the writer wants to affect.
- ❖ **Ethos:** the authorial qualities that both are brought to a reading of the text by the writer’s reputation and are implicit within the text and derivable by the reader. Typical desired authorial qualities include credibility, honesty, expertise, and objectivity, among others.
- ❖ **Subject Matter:** elements of what is being written about that stimulate writer and reader. Subject matter can take various forms, such as problems, the subjects of argumentative claims, and goals of projects.

NOTE: Again, the difference between low road and high road transfer of composition knowledge is determined by the writer’s reflexivity.

EXAMPLE: Scholars typically write for different publications with different readerships, but if the readerships are perceived as being virtually the same or very similar, considerations of audience probably will be subconscious. But if a scholar is asked to write for an audience outside of his or her field, considerations of audience will (or should) surface and become fully conscious.

Implications for Teaching Composition:

- ❖ 2 techniques for teaching for transfer (Perkins & Salomon 28):
 1. **Hugging:** teaching in ways such that the context of knowledge acquisition resembles the context or contexts in which the knowledge is expected to be used (low road transfer). Service learning and problem-based learning techniques often achieve transfer through “hugging” techniques.
 2. **Bridging:** teaching in ways that create conditions for high road transfer. “Bridging” requires encouraging and provoking students to attempt generalizations and abstractions of knowledge they are learning in order to perceive uses of that knowledge across contexts.

NOTE: Bridging and hugging are NOT disconnected, contrary techniques. Research suggests that together, they enhance learning and knowledge transfer.

❖ Teaching for transfer:

1. Imagine the transfer that you want to occur. Consider what contexts you want the knowledge applied in and how it should be applied.
2. Shape the instruction to create a bridge across to those contexts by deliberately provoking students to reflect on what they are doing. As Perkins and Salomon write, “[A] major goal of teaching for transfer becomes not just teaching particular knowledge and skills for transfer but teaching students in general how to *learn to transfer*” (30).

EXAMPLE: Teaching Shakespearean plays and sonnets can have several different educational outcomes: (1) helping in understanding literary history; (2) helping in understanding creativity; (3) teaching critical thinking; (4) helping readers to understand issues and problems in their own lives. How these literary texts are taught will determine which of these outcomes is emphasized. Teachers of Shakespeare, then, need to decide which outcome or outcomes they want and then consider how best to teach to the transfer required to achieve that result.

- ❖ Practicing writing alone will NOT enhance the transfer of composition knowledge. Some people assume that writing is “local knowledge,” and therefore *automatically* (low road) transferable. In fact, because writing contexts / situations (purposes, audiences, ethos, and subject matters) change, writing should be considered a high road transfer activity. Thus, the transfer of composition knowledge requires *mindfulness*.
- ❖ Combine both hugging and bridging transfer techniques. For example, you should consider contextualizing your writing assignments (hugging) but also do and say things in class to provoke students to reflect on their decisions as writers and to attempt to generalize their experiences as writers so that they can see connections across contexts.
- ❖ Provide student writers with time to *incubate*. **Incubation** = an interval of time during creation when the mind does not consciously pursue a solution to a problem or insights into an issue or project but when the mind seems to be unconsciously searching its “data base” of memory for knowledge that can be applied to the context in which the person has been working.

A crucial factor in incubation = discouraging premature closure (Ronda L. Dively, “Incubating the Expert Persona: Theory and Practice for Enhancing Academic Literacy,” *Writing on the Edge* 10.1 (Fall/Winter 1998/99): 98. Teachers must discourage students—and writers must discourage themselves—from shutting down their generation of ideas before they have allowed their minds adequate time to search their “data base.”

Writing Context Assessment Heuristic

On the following page, you will find a heuristic (or learning aid) for consciously assessing writing contexts. This heuristic is intended for any writer's use as a way of encouraging and enhancing high road transfer of composition knowledge. These questions are meant to work in two ways:

1. To heighten awareness of the writing context; and
2. To, then, allow for contextual cues to emerge from the writer's memory, cues that will facilitate transfer of appropriate composition knowledge from the composition course to non-composition writing situations.

Writing Context Assessment¹

Purpose

1. What exactly does the assignment ask you to do? What is its purpose? Are you simply to demonstrate knowledge? Or are you to argue a claim or explore an issue?
2. What hidden aims or sub-goals do you have in fulfilling this writing assignment? What are your personal motivations and goals in accomplishing this assignment?
3. What are the assignment's specific requirements? Length? Format?

Subject Matter

4. What knowledge or information do you have about the subject matter? What knowledge (relevant or not) about the subject matter can you recall through *internal research*—that is, through systematic recall techniques, such as brainstorming, freewriting, and journalistic questions?
5. What knowledge of information do you need to acquire through *external research*—that is, through systematic library, field, or laboratory research—to accomplish this writing task?
6. What problem(s) does this subject matter suggest to you? How might the problem(s) give you a different angle on the subject matter?
7. How might you limit—or broaden—the assignment to make it more interesting to you or more workable for you?

Audience

8. To whom is this text addressed? Are there multiple audiences for this text? Is the audience addressed the real audience whom you expect to read and be affected by this text?
9. Who is the *real audience* for this writing? Who is really supposed to read this text? What are their features or characteristics? What discourse community do they belong to? Are there certain *formal* requirements (requirements relating to organization, grammar, punctuation, spelling) that your audience expects?
10. What is your attitude toward your real audience?
11. What response(s) do you want to evoke?

Ethos

12. What authorial qualities does your text need to exhibit?
13. What will you need to do to achieve these authorial qualities?
14. What attitudes will your audience expect you to hold? What attitudes might disturb or offend them?

Process

15. What do you intend to do to accomplish this task? How much planning do you intend to do? How much time are you allotting for *incubation*—that is, the unconscious “thinking” about the subject matter? How many drafts do you expect to produce? How much time are you allotting for revision? Who will provide feedback on your draft(s)?

¹ Some of the questions here have been adopted and adapted from the 5th edition of *The St. Martin's Handbook* by Andrea A. Lunsford (Boston: Bedford/St. Martin's, 2003) and from earlier editions of that same handbook.