Transfer and Engagement: From Theory to Enhanced Practice

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Before teaching modules from the Expository Reading and Writing Curriculum (ERWC), it may be helpful to ask yourself two questions: "What do I want to achieve *for myself* or *for my curriculum* in teaching these materials?" and "What do I want *for my students* in teaching these materials?"

Although ERWC was designed with a particular purpose—to help students develop the strategies and habits of mind to support success in college reading and writing and lifelong learning—it incorporates a great deal of flexibility, rather than asking instructors to teach directly from the printed materials and follow a prescriptive program.

Each of the modules includes a series of activities and suggestions for additional support; however, the authors deliberately left to instructors' professional judgment the choice of which readings and activities to include, how to present those activities, how to prepare students for them, and what activities should follow them. Because of this freedom, *how* instructors approach the modules matters as much as the design and content of the modules. We have learned, through the years of experience teachers have had teaching these modules, that how instructors frame activities can have profound consequences in terms of students' engagement and their ability to transfer their learning to new reading and writing situations. We have also learned that instructors must modify these modules for their particular students—adding scaffolding for those students who need more support to complete the activities and removing scaffolds from the modules for more advanced students.

This essay addresses these issues first by discussing the principles of teaching for transfer, then by discussing principles of scaffolding and the formative assessment that helps us decide appropriate levels of scaffolding for our individual students, and finally by discussing applications of these principles to each of the cells in the Assignment Template. Having read the "Theoretical Foundations" article in the front of the professional learning binder, you know the principles that underlie the *design* of these modules. This essay attempts to lay out the practices and principles behind the most effective *planning* and *teaching* of these modules.

Teaching for Transfer

As noted in the "Theoretical Foundations," "We encourage teachers to consider new ways to build bridges between their students' valuable out-of-school knowledge and literacies and the in-school knowledge and literacies that will support students as they move beyond high school, into college, career, and community" ("Taking an Assets-Based Approach" para. 2). In short, that means highlighting for students reading and writing strategies that they can *transfer* across contexts. While such transfer can happen naturally with sufficient experience and practice in a variety of contexts, teachers using ERWC materials have found that they can facilitate transfer by addressing it specifically in their planning and teaching of the materials. According to Smith and Wilhelm (2006), summarizing Haskell (2001), four aspects of teaching make it more likely that students will transfer their learning:

1. Students have a command of the knowledge that is to be transferred.
2. Students have a theoretical understanding of the principles to be transferred.
3. The classroom culture cultivates a spirit of transfer.
4. Students get plenty of practice. (26)

In its design, this third edition of ERWC attends quite consciously to these four aspects of teaching. Mini-modules focused on key rhetorical concepts help students begin to develop reading/writing *knowledge* and introduce them to *theoretical understandings of the principles to be transferred*. Students re-engage and deepen this knowledge and practice with the skills in the extended modules. This approach is based on a teaching-for-transfer, first-year college composition class developed and investigated by Kathleen Yancey, Liane Robertson, and Kara Taczak. Frequent opportunities for reflection and metacognition help students develop that *theoretical understanding*. A focus on learning goals and connections to high-interest, real-world topics helps to promote a *spirit of transfer*. And to elaborate on the fourth point, it is worth noting that simple practice is not enough to lead to transfer. Halpern and Hakel, in "Applying the Science of Learning to the University and Beyond," emphasize that for best results students must practice over time and in a variety of situations. It is for this reason that ERWC modules return to applying the same strategies across modules.

Two Kinds of Transfer—Low Road and High Road

Educators use the term *transfer* to refer to the application of knowledge and skills learned in one context to tasks attempted in another context. When we teach students vocabulary, we hope that they will do more than score well on a vocabulary test. We hope they will recognize new vocabulary words when they encounter them in the future, perhaps even using them in their speech and writing. When we teach them strategies for annotating texts, we hope that students will use those techniques when they encounter challenging texts in the future, including those in non-school related contexts. As we describe in "Theoretical Foundations," "This involves repurposing, or 'remixing' (Yancey et al 2018), knowledge, skills, and dispositions acquired in one setting so that they can be meaningfully redeployed in settings that may differ significantly from the original learning environment" ("Transfer" para. 1).

How readily we adapt and apply knowledge and skills we have learned in one context to problems in a new context, however, depends upon a variety of factors, including our motivation and the similarity between the tasks. Because explicit attention to transfer can improve motivation, this approach promotes transfer indirectly as well as directly. Our recognition of similarities matters because we must know that the knowledge and strategies we have learned apply in the new situation. To use a simple example, students may or may not realize that in some cases they punctuate quotations the same way whether they are composing dialogue or quoting from a text.

We most easily transfer knowledge and skills when we practice in a situation that resembles closely the task and situation in which we will ultimately be using our skills. Perkins and Salomon (1992) describe transfer between very similar situations as "low-road transfer." Taking the example of quotation marks, if we practice writing dialogue as a class and then ask students to compose dialogue on their own for homework, we are setting them up for low-road transfer. When we directly teach students to answer the kinds of questions they will see on high-stakes tests and regularly practice those skills, we again prepare

students for low-road transfer. For instance, in the mini-module "Becoming Assessment Savvy," students practice deconstructing test questions. Although they are not deconstructing the questions they will actually have to answer on the Smarter Balanced tests, they should be able to transfer that skill to the test-taking situation.

Ideally, we also hope that students adapt and apply what they learn in situations that differ significantly from the conditions in which they have learned them. Perkins and Salomon describe this as "high-road transfer." We most effectively learn skills well enough to transfer them to new situations by practicing those skills in a variety of ways in a variety of contexts, internalizing both the skills themselves and a sense of how to use the skills in different contexts. You see this principle in the design of ERWC, in that techniques that match the practices of skilled readers and writers repeat across modules. As we note in the "Theoretical Foundations," "Like all complex social practices, learning to read and write in these multifaceted ways—in English, Science, History, and Math—takes time and repeated opportunities with plentiful and strategic guidance" ("Broadening" para. 3). By practicing rhetorical reading and answering critical thinking questions repeatedly with a variety of texts across a long period of time, we make it more likely that students will be able to approach new texts critically.

Education theorists identify three kinds of knowledge required for high-road transfer—*declarative*, *procedural*, and *conditional* (Olson 2007). When we refer to *declarative* knowledge (knowledge of *what*), we mean, essentially, content—the listing of facts, the naming of names. *Procedural* knowledge (knowledge of *how*) includes the knowledge of how to find those facts and what to do with them. When students acquire procedural knowledge, they are literally learning how to "do" a discipline, coming to recognize both how that discipline works and how knowledge in that discipline is communicated. *Conditional* knowledge (knowledge of *why, when, under what circumstances*) refers to the knowledge of which procedures to apply in which circumstances. For example, how would evidence be valued and used differently by historians, scientists, and literary critics? Grammar provides a simple example—declarative knowledge of grammar may include the ability to list parts of speech or recite a list of prepositions. Having procedural knowledge of grammar means knowing where to find those parts of speech and how to arrange them into a variety of sentence structures. Finally, conditional knowledge of grammar means knowing in which situations one should use which kinds of sentences.

Grammar provides an excellent example as well for considering another aspect of knowledge: that it may be either tacit or explicit. All students enter high school with a great deal of tacit knowledge of grammar—they can form comprehensible sentences in speech and writing, in whatever native language or dialect they use most. They also come with some tacit conditional knowledge—they know how to shift their language choices when they are addressing different audiences in different contexts (for instance, text messaging versus school essays). Helping students to make their knowledge of grammar explicit, however, enables them to make more conscious and strategic choices about language use. According to Hillocks (2008), describing writing instruction, instructional "treatments with the largest gains . . . all focus on teaching procedural knowledge, knowledge of how to do things" (320). For high-road transfer, we need to teach students the explicit procedural and conditional knowledge that will help them decide which skills to apply to solve problems in new situations. The activities in ERWC foster procedural knowledge through students' repeated engagement in strategic activities; in order to help them develop the necessary conditional knowledge to support transfer, we need to explicitly frame activities, describing (or asking students to describe) the elements of the situation that call for particular approaches to text and

inviting students to reflect upon their use of strategies.

The Importance of High-Road Transfer

Some students come to us with a variety of school-like reading and writing experiences. For those students, applying their tacit procedural and conditional knowledge to "struggle successfully" as Beers describes, with difficult school texts requires only low-road transfer because they have a great deal of practice in situations like those they see in school. Most of our students, however, although they may do a great deal of reading and writing, do so in circumstances very different from school—reading Web sites or popular magazines, interacting through text messages or in social networking communities. In order to prepare those students to succeed in the many different academic situations they will encounter, we need to help them make explicit what they know about reading and writing and explicitly teach them new strategies, including when and how to use them. This reflection on what students know and how they use what they know is called metacognition—thinking about thinking.

Approaches to Teaching ERWC Modules that Support High-Road Transfer

Most of our students, whether they come to us with school-like literacy experiences or primarily out-of-school literacies, can improve by making their knowledge about their own thinking explicit—developing *metacognition*—and sharing that explicit knowledge with each other. Specifically, they can share both *how* they read and write and *why* they do so, and we can do so as well, as the most experienced readers and writers in the classroom. As we suggest in the "Theoretical Foundations," "Rich [metacognitive] conversations also offer all members of the classroom community many models for thinking – everyone has access to others' thought processes and use of language, both in terms of comprehension strategies and rhetorical perspective taking" ("Supporting Literacy" para. 2). These conversations can also help students see the ways that they can use their problem-solving strategies in college and out-of-school contexts. Smit (2004) argues that in order for writers to transfer skills between contexts, they must understand what similarities between the contexts call for those skills. The most skillful instructors using ERWC modules make this metacognitive conversation a regular (and repeated) part of their instruction. Later in this essay are particular examples of ways such teachers do so at each stage of the reading/writing process.

Strategies—Not Just Activities

Essentially, instructors who find ERWC modules most helpful remember that they are doing more than leading students through a series of activities around a particular set of texts. As we describe in "Theoretical Foundations," "The ERWC supports young people's development of deep literacies and literate identities—the skills, dispositions, and habits of mind that will expand their opportunities to engage fully and meaningfully in the 21st century" ("Conclusion"). The most effective instructors using the ERWC framework are constantly asking themselves—and encouraging their students to ask themselves—How does this activity help me compose meaning? Why does it help? What have I learned about reading/writing that I can use for other reading and writing tasks? In what other contexts can I use a similar approach?

Expansive Framing

This questioning relates to a larger issue mentioned in the previous section on the two kinds of transfer, instructional framing. The language instructors use to describe what is happening in the classroom matters for how students make connections between those strategies and their prior and future learning. In an article proposing explanations for the relationship between what they call expansive framing and transfer of learning, Randi A. Engle, Diane P. Lam, Xenia S. Meyer, and Sarah E. Nix review experiments and classroom research that investigated the relationship between how tutors and teachers describe classroom activities and student learning and transfer. They describe two key elements of that framing—setting (time, place, participants) and roles—and make suggestions for framing that leads to transfer. For instance, about setting in general, they note that when tutors "Ask students to specify other settings in which the topic(s) have, are, or will be likely to come up in their lives," students are more likely to transfer that learning (219). Even using "present progressive verbs ("you're figuring out")" rather than verbs that suggest the figuring out is finished makes a difference. I include below the entire table of framing descriptions that Engle and colleagues include from their study of tutoring.

Aspects of Contexts That Can Be Framed	(Shown to Promote Transfer)	(Shown to Discourage Transfer)
Setting:	Ask student to specify other settings in which the topic(s) have, are, or will be likely to come up in their lives	Do not ask student to specify other settings in which the topic has, is, or will be likely to come up in their lives
• Time	• Refer to the study as a whole as including both days	• Refer to each part of each day's session as a separate event
	• Refer to other times, both inside and outside of the experiment	• Make no references to times other than the just completed present
	• Use present progressive verbs ("you're figuring out")	• Use simple past with completion verbs ("we're finished with that now")
• Place	• Frame location as at a university	• Frame location as this specific room
	• Refer to other places—their home, school, doctor's office, etc.—in which they can use what they're learning	• Do not make references to other places outside of the room
• Participants	• Treat larger activity as involving the student, you and the rest of the study team, plus their family, friends, teachers, and anyone else they mention above	• Treat tutoring event as a private matter involving only you and the student, and not other members of study team or other people they know
	• Ask student how they would explain their ideas to the other people they mentioned as part of the settings	• Have student explain the text's ideas to you just as often and as extensively as in the expansive condition
	• When students show understanding of one of the key ideas, note that they can now explain that to whoever they mentioned as an audience	• When students show understanding of one of the key ideas, note that they have properly represented what the text said
Roles	• Ask student to explain their own evolving ideas about the system using the text sentences as a resource.	• Ask student to explain what the text has said about the system in each sentence.
	• Revoice student's explanations, crediting student with authorship and checking with them about whether you reformulated their ideas accurately.	• Reformulate what student said as what the text has presented, not giving them an opportunity to correct as the reformulation should be accurate.

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Teaching for Engagement

Not coincidentally, this specific attention to transfer also improves student engagement and motivation and helps students sustain their attention in the face of what might otherwise seem to be redundancy of activities across modules. Repeated practice and reflection ensures that students "have command of the knowledge . . . and theoretical understanding" of the strategies and skills we want them to transfer to future encounters with reading and writing; in this way, we help them build and feel "a sense of control and competence," a factor Smith and Wilhelm, drawing from research by Csikszentmihalyi (1990), emphasize contributes to "flow experiences," the sense of being completely involved in an activity. Research on intrinsic motivation by Deci (1995) also suggests the importance of a sense of competence to help students feel autonomous in their participation. When individuals feel competent or confident that

they can build competence (think of adolescents' engagement with video games that build skill through increasingly challenging levels), that feeling can support a sense of autonomy. While a sense of competence can help students feel autonomous, it is not itself enough to build that autonomy. Students also feel a sense of control or autonomy when they decide for their own purposes to engage in an activity. That sense of autonomy is promoted when students have a theoretical understanding of the principles to be transferred. If students understand *why* they are doing what they are doing, they are more likely to choose to engage in the activities for their own purposes, improving their motivation and learning.

The example of adolescents' engagement with video games helps us see other ways that teaching ERWC modules can promote student engagement and "flow" experiences. Repeated practice of strategies with different reading and writing tasks keeps the level of challenge appropriate for students. As students practice familiar strategies with new and more challenging texts or in pursuit of more sophisticated tasks (for instance, synthesizing ideas from a variety of readings), the additional challenge keeps them engaged. The sequence of activities before, during, and after reading and writing also provides frequent opportunities for feedback, both from the teacher and from other students. Both frequent feedback and the social interaction involved in feedback keep students engaged in the immediate experience of learning. Helping students remain mindful of the skilled reading/writing practices that they are developing also strengthens students' sense of themselves as readers and writers and helps them to see themselves as making purposeful choices to engage in those activities.

Scaffolding, Gradual Release of Responsibility, and Formative Assessment

Instructors who have the most success with ERWC modules not only focus attention specifically on transfer of learning but also take a long-term view of student competence, planning across the year for students to become independent users of the skills and strategies they learn in the modules. Thus, these instructors are scaffolding the activities to support transfer of learning. This often requires explicitly teaching students how to engage productively in the variety of activities in ERWC modules (especially for use with younger students) and gradually removing support, so that over time students take greater and greater control of their reading and writing practices. In this section, we discuss scaffolding, a particular pattern of scaffolding called the gradual release of responsibility model, and the formative assessment that guides both.

Scaffolding

Helping students develop new skills always involves meeting them at their current level of skill and supporting them until they can practice the new skills on their own. The authors designed ERWC to carefully scaffold students' reading and writing; however, only you, the instructor, can know whether the modules provide appropriate support and challenge for your students. Providing scaffolding helps to ensure that students feel the sense of competence that promotes intrinsic motivation and flow experiences; assuring that the scaffolding is *appropriate* helps to keep the level of challenge sufficient to engage students without frustrating them. Take annotation, for instance. In the module, "Changing Minds," the directions for annotating are the following: "When you annotate, highlight the main ideas. If there are words that are essential to your understanding of the article that you still do not understand, look them up in an online dictionary. Be prepared to ask questions about what you have read when you return to class" (9). For students who have already learned how to identify main ideas, this provides enough information. For those who do not, you may need to add modeling, think-alouds, or other kinds of support to teach students how to identify the main idea so they can successfully annotate.

The challenge when thinking about supporting students is finding the balance between under- and over-scaffolding. As we describe in "Theoretical Foundations," "ERWC is grounded in the idea that productive struggle leads to growth and independence" ("Supporting Productive Struggle" para. 1). If we under-scaffold, students may struggle in ways that are not productive. If we over-scaffold, they may not struggle enough to learn. Complicating this issue is that students may initially respond to both under- and over-scaffolding by complaining that a task is "boring" or "stupid." As we practice formative assessment and help students learn to assess themselves, we can figure out whether students need more, less, or different support to learn and remain engaged.

Gradual Release of Responsibility

Fisher and Frey (2008) describe a gradual-release-of-responsibility model of teaching that moves from teacher modeling to student-supported activity to independent practice—I do, we do, you do together, you do alone. This model works both within individual lessons and across the year. As noted in the introduction to the Assignment Template, "This template presents a process for helping your students read, comprehend, and respond to nonfiction texts. We recommend that, at the beginning of the semester, you guide your students through each step of the process. As they become familiar with the reading and writing strategies and internalize some of the basic processes, they will be able to complete some of the steps on their own." If our goal is to improve students' independent competence, we must ask them to apply the skills/strategies they learn with our guidance to reading and composing new texts on their own. As students internalize the mindset of rhetorical reading and writing and develop greater competence with reading and writing strategies, the most successful teachers of these modules give students greater freedom to decide which of the strategies to use while they read and write. In that way, students take increasing control of their learning and exercise their procedural and conditional knowledge in a supportive environment.

Formative Assessment

At the heart of our decision making as instructors is assessment. In order to teach our students effectively—to choose how much scaffolding they need, to determine how much responsibility we can release—we must determine what our students know and can do. Just as the modules follow a predictable pattern—meaning-making strategies for before, during, and after reading and writing—the modules afford opportunities for instructors to assess student knowledge and competence before, during, and after instruction. Formative assessment is as much an approach to examining student work as it is a particular set of strategies—if we look at student talk and writing as providing us opportunities to collect information about what they know and can do in order to shape our instruction appropriately, we are practicing formative assessment. Practicing formative assessment also encourages us to give students the immediate feedback they need to remain "in the moment" of learning (Smith and Wilhelm). While not all of the feedback students receive must come from us (hence the value of group activities in which students provide immediate feedback to each other), feedback from instructors can help shape students' developing understanding and sense of control and competence. Such feedback also helps students strengthen their ability to assess their own deepening understanding. As with other types of performance, our goal with formative assessment is to help students develop metacognitive skills that allow them to take increasing responsibility for their own formative assessment, gradually releasing the responsibility for tracking their learning to the students themselves. ERWC 3.0 makes that move explicit by including goal-setting and

reflection as activities within the modules.

ERWC was designed to help students develop the knowledge, strategies, and habits of mind needed for success in college and career. When we plan our instruction intentionally, carefully considering the interconnected ideas of transfer and engagement, we help ensure that our students will meet these expectations.

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