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The Terrain of College Developmental Reading

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EXECUTIVE SUMMARY

This white paper, commissioned by the College Reading & Learning Association, examines the terrain of college developmental reading. The terrain of college developmental reading is vast and varied, including both classroom and non-course-based instruction, and it expands traditional understandings of what is considered remediation in the reading field. Because developmental education has recently garnered unprecedented attention at national levels, this white paper is especially timely. Our purpose is to engage in a critical look at the field to illuminate both the role and impact of college developmental reading.

We posit four fundamental terrains of college developmental reading:

- The Foundational Terrain, which includes the prevalence and necessity of developmental reading. Developmental reading courses have been in existence for over a century and, in fact, have been intertwined with the history of postsecondary education as a whole. Despite criticisms and concerns about developmental reading coursework at the college level, current studies indicate a continuing need for many entering students.
- The Theoretical Terrain, including the underlying assumptions and theoretical perspectives that knowledge is situated and discursive. This view of literacy as a social practice is discussed as a contextualized enculturation for helping students understand what it means to read in college.
- The Instructional Terrain, which includes a shifting of instruction from a deficit-based "remedial" approach toward a multidimensional, strategic approach based on social, cognitive, metacognitive, and affective aspects of learning. This approach relies on active, student-centered instruction that focuses not only on procedural knowledge, but also on critical thinking and problem solving.
- The Potential Terrain, including considerations of program effectiveness and evaluation, terminology, and major shifts on the horizons. Developmental reading is no longer thought of as a set of stand-alone courses as many institutions are beginning to offer instruction in multiple ways. Considering theoretical perspectives, the multidimensional nature of instruction and learning, and institutional needs, two imminent shifts are discussed: integrated reading and writing courses and the impact of the standards movement—specifically, the Common Core State Standards—on the field of college developmental reading.

The unique positioning of college developmental reading within institutions of higher education offers potential for impacting a large number of postsecondary learners. These considerations, including implications and instructional recommendations, are discussed.

The Foundational Terrain of College Reading

Recently, college developmental reading—and developmental education in general—has been enjoying exposure and discussion in both educational and political outlets at unprecedented levels. While generally praising the principled intentions and ideals embedded in critical reading support for struggling college students, the discussion has not been entirely positive. Criticisms frequently revolve around questions of why students are taking reading classes in college, with a focus on what is assumed to be the most poorly prepared generation of students in U.S. educational history. As part of this discussion, calls for eliminating developmental courses, including college reading, are regularly heard; Levin and Calcagno (2008) note that, "the 'remediation crisis' has surely become one of the most controversial issues in higher education in recent times" (p. 181). But although this is indeed a topic of considerable debate, neither the topic of postsecondary developmental education nor complaints about students' lack of preparedness are new.

Politicians, pundits, and some educators who lament the current state of education in the U.S. often focus their questions around how U.S. education could have gotten so bad that so many college students now need developmental reading coursework. But that is the wrong question, for a couple reasons. The first reason is that developmental reading courses are not new to postsecondary education. In fact, there is a rich history of postsecondary literacy instruction in the U.S. The second reason is that reading instruction is entirely appropriate at every educational level, including elementary, middle, secondary, and postsecondary.

College reading courses have been historically prevalent, and they are available because they are needed. Both of those premises—prevalence and need—are controversial, however, and in the first section of this white paper we critically examine them.

HISTORICALLY PREVALENT

Although Martino and Hoffman (2002) noted that "The number of college students experiencing difficulty with reading comprehension and study strategies is surprisingly high" (p. 310), we might emphasize that any level of difficulty can be considered high, as educators strive for successful educational experiences for all their students. But the level at which this is "surprising" may need to be rethought—the need for college reading instruction is not new.

Over 100 years ago, at the beginning of the 20th century, in assessing college students' literacy proficiencies Copeland and Rideout (1901) complained that "at one extreme of this class of Freshmen are the illiterate and inarticulate, who cannot distinguish a sentence from a phrase, or spell the simplest words" (p. 2) and that "so few of them have been brought up to read anything at all, or would now start to read of their own accord, that an acquaintance with a few books must be forced upon them" (p. 63). Triggs (1941) wrote four decades later that "research has established beyond a doubt that students entering college vary greatly in reading proficiency" (p. 371) and in the middle of the 20th century Barbe (1952) estimated that "twenty percent of entering college students read less efficiently than did the average eighth-grade pupil" (p. 229). These complaints—some dating back more than a century—provide some context to fears that the need for college developmental reading is a recent, unprecedented need. Stahl and King (2009) noted that college reading has been an established subfield of reading pedagogy since the early 1900s, with evidence of reading assistance classes existing before that, and developmental education services in general dating to 1630. Where there is developmental education, there is almost certainly developmental reading instruction, since "The history of developmental education cannot be separated from the history of college reading instruction. The two fields are mutually entailed" (Stahl & King, p. 9). As an example of this historical relationship, Boylan (2003) observed that one of the reasons for the establishment of the first college preparatory department over 150 years ago at the University of Wisconsin was to provide postsecondary reading instruction for its students. Indeed, most nineteenth- century students in American colleges could not meet what those colleges termed basic skills in reading, and at some universities there were more preparatory students than non-preparatory students; by 1889, 335 out of 400 universities in the U.S. had preparatory departments (Wyatt, 1992). By the 1930s, Ivy League universities were among the many institutions providing developmental reading programs (Maxwell, 1997). Research on reading in college soon followed. Dissertations focused on college reading appeared in the first decades of the 20th century (e.g., Anderson, 1928) and research designed to inform the improvement of college reading was commonplace by that time (e.g., Pressey & Pressey's "an experiment in teaching college students to read" [1930, p. 211]). There were enough college reading programs, and enough studies on them, that halfway through the 20th century Robinson (1950) was able to do what amounts to an early meta-analysis of college reading studies, covering over 100 research reports.

Literacy studies focused on the current generation report that more than 75% of community-college students—and more than 50% of four-year college students—are "non-proficient" in college-level document and prose literacy abilities (American Institutes for Research, 2006; Associated Press, 2006a). In addition, the ACT college entrance test indicated that about half of the incoming students were prepared for the reading requirements of a typical first-year college course (ACT, 2006; Associated Press, 2006b). In an analysis of 57 institutions providing data as part of the Achieving the Dream: Community Colleges Count initiative, Bailey, Jeong, and Cho (2010) found that 33% of the students in those schools were referred to developmental reading courses. At the turn of the most recent century, 42% of all first-year students in public 2-year colleges were enrolled in developmental courses, and approximately half of those students—20%—were enrolled in developmental reading (Parsad, Lewis, & Green, 2003). Note that the 20% figure those researchers quote is the same percentage noted by Barbe (1952) half a century earlier. An exact count of students needing developmental reading courses varies widely depending on the database analyzed as well as the local characteristics of each institution, but what is clear is that, historically, a substantial proportion of the college population has been served by developmental reading. As the next section makes clear, the need for college reading instruction has not diminished.

NECESSITY OF COLLEGE READING CLASSES

Despite developmental reading courses being intertwined with the history of postsecondary education, reading as a college course does not necessarily enjoy broad acceptance—or even awareness—by the general public, or sometimes even fellow educators. One common question centers on the level of the educational context and the appropriateness of literacy instruction at that level: In other words, "don't college students know how to read?"

This viewpoint stems from an outdated piece of conventional wisdom about early reading instruction that at a certain juncture—usually around third grade— instruction about reading stops and instruction using reading begins; that is, "first you learn to read, then you read to learn." Viewed through this perspective, there should be no place

in college for reading instruction of any kind, since, by the time they are in college, students should have "learned to read" so that they can get busy "reading to learn."

However, as an educational reality, that dichotomy is an artificial one. Many educators realize the need for continued literacy instruction in the middle grades (International Reading Association, 2006; Moore & Stefanich, 1990; Wilhelm, 1997), and literacy instruction in secondary contexts has received attention as well (Allington, 1994; International Reading Association, 2006; Pressley, 2004). What is clear is that instead of "learn to read, then read to learn," the natural progression of literacy abilities and needs in K-12 contexts should be more like "learning to read and reading to learn go hand in hand" and that literacy instruction is an accepted part of the entire K-12 experience.

We would extend this thinking to the postsecondary context: Coursework in college-level reading is an important part of a postsecondary educational context as well. Shanahan and Shanahan (2008) argue that there is a need for advanced literacy instruction for all students beyond what is traditionally offered in pre- college educational settings. Some assumptions about literacy development include a belief that proficiencies automatically evolve as readers advance though school: that as long as students have acquired adequate basic reading skills, they will be able to read anything successfully. However, this notion is not accurate. According to ACT (2006), the number of students on track for college readiness actually shrinks as they progress from eighth through twelfth grade. Further, early reading gains do not necessarily push students toward more advanced literacy achievement without continued instruction (Shanahan & Shanahan, 2008). Williamson (2008) found that there is a continuum of college readiness when it comes to learning from text because the literacy demands are more challenging in college-level text. Students who were proficient readers of high school text may still experience difficulty because their reading strategies are not appropriate for the types of texts they encounter in college. There is a clear need for expanded literacy instruction and support at postsecondary levels.

The Theoretical Terrain of College Reading

For decades, there has been no dearth of theories and models of reading cycling through the larger field of literacy. Pearson and Stephens (1994) describe some of the diverse perspectives that have impacted the field as being an "interdisciplinary quest" that included linguists, psychologists, sociologists, psycholinguists, sociolinguists, philosophers, political theorists, and critical theorists. Although this interdisciplinary focus in the field at large is a strength, it has also resulted in competing theories that are mutually exclusive (or at least approached that way). While the classic triad of bottom-up, top-down, and interactive models were products of their time that fell out of favor when faced with the "truth" of whatever the new model is, there are still palpable dichotomies that reflect, and drive, theoretical orientations. One such dichotomy is that of word-recognition versus meaning-construction, where the former reflects a view of literacy that involves rapid, accurate word recognition, based on accurate letter-recognition, where phonemic awareness is a necessary precursor to reading. The latter, meaning-construction, is associated with an approach that views written language as a semiotic system in which the reader constructs meaning utilizing several cue systems in the text, where schema and text processes transact to create a parallel text.

Another influential dichotomy in the field concerns the extent to which literacies are neutral or cultural in principle. Street (1984) terms those models or perspectives that consider literacy to be neutral and independent of context as "autonomous." Conversely, perspectives that link literacy to power structures and as being necessarily embedded in social contexts he terms "ideological." Related to those terms, other dichotomies arise as well, as between "technical" aspects of literacy and "cultural" aspects of literacy: a focus on alphabetic principles, for example, versus a focus on pragmatic implications of a text. Importantly, Street (2001) views the ideological model as subsuming—not denying— aspects of the autonomous model, in that cultural aspects of literacy take into account technical aspects.

Nevertheless, the field of literacy is given to polarities and dichotomies, different ends of philosophical spectra. One reason these dichotomies persist is that the instructional implications of each are often viewed as mutually exclusive; the most accessible example being the classic "reading wars" of the late 20th century, with one side emphasizing explicit phonic instruction and the other emphasizing a literature-based approach. That is to say: entrenchment happens and such entrenchment impacts the field from beginning through postsecondary readers.

LITERACY AS A SOCIAL PRACTICE

Viewing literacy as a social practice—one typified by the specific context in which the literacies are found and valued—is crucially important when considering college developmental reading. Regrettably, to the extent that current college reading textbooks reflect the type of teaching going on in the classroom (Wood, 1997), then college developmental reading practice is often characterized by a focus on word-attack strategies and discrete-skill building.

A recent study that examined literacy demands for first-year community-college students bore this unfortunate premise out, noting that their research uncovered "considerable evidence suggesting that many of the deficits of secondary school language arts instruction are being replicated rather than remedied in community college teaching"(National Center on Education and the Economy, 2013, p. 24). Our theoretical perspective calls such an approach into question, particularly because the literacy practices of academic disciplines are wide-ranging social practices (Lea & Street, 2006). Such social-practice perspectives are not typically found in developmental reading textbooks, which often emphasize a general or generic comprehension approach. This generic comprehension approach is typified by focusing on the types of questions one might be asked on an exam—such as literal versus inferential, finding the main idea in an out- of-context passage, or defining vocabulary that does not take specialized knowledge or disciplinary social practices into account. This transmission model is not supported by research. ACT (2006) data indicated that a more salient factor in test performance is text difficulty: Regardless of the type of question students are asked, text context, complexity, and degree of familiarity will have a considerable effect on student response. Our goal, then, would be to prepare students for text complexity, such as text coherence, organization, disciplinary conventions, and sentence structure, rather than focusing on discrete skills (Shanahan, Fisher, & Frey, 2012). As an example of this approach, Simpson and Nist (2000) promote teaching underlying processes of textual understanding. Students focus on generating strategies that help them reduce, organize, summarize, and elaborate on the text. We can think of this as promoting "text prep" as opposed to "test prep."

We view postsecondary literacy instruction not as a set of technical skills to learn, but as a constructive series of connections that take place within the context of college. That is, this instruction takes place in a social network in which students must be able to critically examine their role in the network and how to navigate this aspect of society.

THE ROLE OF DISCOURSE

Approaching literacy as social practice is related to Gee's (2005) concept in linguistics of "big D Discourse" (delineated as "Discourse" with a capital "D" here) as opposed to "little d discourse.""Little d discourse" refers to written and oral speech acts, propositions, syntactic arrangements, and a myriad of other aspects of language production: the bits and pieces of language that make up a string of verbal or written text. "Big D Discourse" refers to those aspects of language, but also everything else that marks the user of the language as being an authentic member of a group and how language is used by members of different groups. That is, big D Discourse ("Discourse" from this point forward) includes not only knowing what to say, but when to say it, how to say it, in what context it is appropriate, and so on. For example, think of all the different ways to describe a sporting event. Depending on whom you were talking to—fellow sports fan, spouse, child, grandparent, stranger on the subway, a person from a country where the game is not played, and so on—the way you described the event would change. Everything from the vocabulary used, the shared knowledge accessed, the emphasis on different parts of the description, and the structure and purpose of the description itself could all change. Gee's concept of Discourse helps us understand how the words in such a description may be technically correct across each different description but how the meaning and communication for each is linked to specific contexts and audiences. Applied to college developmental reading instruction, students must understand the Discourse of the academy and be a proficient user of that Discourse. Every strategy, technique, discussion, reading act, or writing act is placed within the context of the academy and the students' lives, and this knowledge is not transmitted to students; instead, they are apprenticed into college academic literacy Discourses.

The kinds of Discourses found in college are usually what Gee (2005) would term "secondary Discourses," in contrast to primary Discourses. A primary Discourse is one often acquired early in life, usually in contexts centered on family and peer groups, and is usually a non-specialized Discourse. In some ways, primary Discourses are what our everyday identities are constructed from, which can change throughout our lifetimes. Secondary Discourses are distinguished from primary Discourses in that they are usually found in institutions or disciplines that exist in a more public, wider-community sphere. College Discourses are specialized, secondary Discourses, which carry with them expectations of identity construction and "belonging" in the institution. One role of developmental education has been to increase students' awareness and control of the secondary Discourses they encounter in college (Paulson, 2012).

Viewing reading through a Discourse lens allows us to understand literacy instruction not as isolated bits of skills to be learned, but rather a focus on when, where, why, and how to apply different aspects of effective reading knowledge and tools. Knowledge of the academic reading and writing expectations across the entire university and how those expectations are realized in each of the student's classes becomes an important point of reference for the student's understandings of academic literacy. This view expands the conception of developmental education beyond a single "one shot" college developmental reading course.

The Instructional Terrain of College Reading

Literacy is a social practice and a large part of instruction involves helping students make the transition to college reading milieus. Because such an approach involves situating both the learning context and the secondary Discourse of college, it is important that the field continues to shift instructional emphases away from skills alone, and toward a sociocognitive focus that embraces both ideological and technical aspects of literacy. In this section we discuss this necessary shift along with several of the factors that contribute to our multidimensional view of instruction.

SHIFT IN EMPHASIS OF INSTRUCTION

An important aspect of increasing the effectiveness of developmental reading is tied to pedagogical choices. It has been estimated that as much as 85% of college learning is dependent upon active, careful reading (Simpson & Nist, 2000). The average reading load for college students is between 150-200 pages a week (Burrell, Tao, Simpson, & Mendez-Berrueta, 1996). However, much of the instruction in developmental reading courses has traditionally centered on a transmission model of teaching isolated reading skills, such as selecting main idea, identifying fact and opinion statements, and other sub-skills (Armstrong & Newman, 2011; Maxwell, 1997), despite calls for a more strategic or process-based approach (Simpson, Stahl, & Francis, 2004). Research results on skills-based instruction show little to no improvement on students' reading ability upon completion of these remedial courses (Merisotis & Phipps, 2000). Such an approach cannot adequately prepare students because the tasks of college vary widely across disciplines and purposes and students are expected to engage and interpret text of increasing difficulty (Attewell, Lavin, Domina, & Levey, 2006; Eckert, 2011).

As a field, it is useful to reflect on our instructional choices and what they reveal about our goals for students in our classes. Wood (1997) described a typical day in a college reading class in 1958 in the following way:

> Students in this college reading class of 1958 began each semester with a reading test (in order to) identify areas of student deficiency… Students read a timed essay, answered multiple-choice questions, and put the results of their speed and comprehension on a graph… After the first day of testing, the classes typically included three types of activities: instruction in a reading skill, a check of textbook comprehension, and practice to improve reading speed. We began each class by teaching one discrete reading skill. For example, we taught main ideas and details, followed by organizational patterns, tone and intent, vocabulary building, and formulas for reading college textbooks, such as Robinson's SQ3R and Pauk's OK4R. … (W)e were able to point out special features of these paragraphs, like topic sentences or context clues, which we, as the expert readers, could then bring to students' attention … Rarely was assigned reading material in class or lab at college level, despite the given talent and ability of the students. Furthermore, if students missed multiple choice questions, we moved them to even easier materials. We did not ask students to practice reading their own textbooks or any other materials they had been assigned to read in their other classes. (p. 80-81)

Although Wood describes this as a traditional, outdated model of reading instruction, it may not look very different from what is happening in many college developmental reading classrooms today. This may be because the standardized tests that students must pass to exit a reading course encourage a traditional model of reading instruction (Wood, 1997) where discrete reading skills are tested. Or it may be because many college developmental reading textbooks focus on presenting skills sequentially and linearly.

One assumption of the transmission model of instruction is that students lack ability and need remediation for skills they had already been taught in K-12 schooling. In other words, students had an opportunity to learn the skills, but did not grasp them. More current transitional views hold that students are able, but there has been a large shift in literacy demands in college (Zhang, 2000). That is, students must learn new strategies that they had not been taught previously. Thus, the goal of instruction is not to fill a deficit, but to teach new literacy strategies that can accommodate the increase in literacy demands in unfamiliar, specialized Discourse milieus.

Shifting the field from remedial to transitional models may necessitate a shift in instruction, because the type of instruction students receive is crucially important. Bray, Pascarella, and Pierson (2011) concluded that "for students who began college with below-average reading skills but not for the above-average readers, exposure to what was perceived as effective instruction had a substantial positive association with growth in reading comprehension." Effective reading instruction is not a monolithic concept, however, and there is a host of important elements to consider when implementing classroom practice, as the next section describes.

THE INSTRUCTIONAL TERRAIN IS MULTIDIMENSIONAL

Although the research literature found little improvement from a transmission, skills-based approach to reading, results of research on strategic reading where the focus includes, but is not limited to, the social, cognitive, metacognitive, and affective processes involved in academic reading has been more encouraging (Alexander & Jetton, 2000; Caverly, Nicholson, & Radcliffe, 2004; Gee, 2004; Kucer, 2009; Pawan & Honeyford, 2009). Each of these foci illuminates a different aspect of reading, and it is through considering all of them that we gain a multidimensional perspective on what it means to read in college. In this section, we consider each element briefly, acknowledging that it is their continual interaction that explains the complexity of reading and reading instruction.

Social. The instructional outcome of the Discourse perspective described earlier might be best thought of as an apprenticeship model. Though a step-by-step "Monday morning" lesson plan would likely violate the spirit of an approach modeled on a situated, Discourse view of literacy, given the instrumental nature of situated context implicit in that perspective, there are a variety of pedagogical models that can be aligned with such an approach.

One such model is the New London Group's (1996) integration of four interrelated, non-hierarchical, non- linear factors. The first of these is Situated Practice, in which "immersion in a community of learners engaged in authentic versions" (p. 84) of appropriate academic practices characterizes daily actions in the classroom. Situated Practice emphasizes the contextualized nature of mastery learning. A student would use context and experience to help them make sense of ideas. However, Situated Practice cannot stand on its own as an approach; students' background experiences vary greatly, and may not lead to a metacognitive awareness of strategic learning. Overt Instruction—the second factor described by the New London Group (1996)—is a useful supplement to Situated Practice. Overt Instruction, in which metacognition is a core function of learners gaining control and conscious awareness of their learning, moves students toward mastery. It is important to note that Overt Instruction does not imply out-of-context presentation and reproduction of discrete skills, but rather deliberate focus on learners understanding both the "how" and "what" of strategic learning.

Critical Framing, the third factor, is concerned with how learners frame their expanding proficiencies"in relation to the historical, social, cultural, political, ideological, and value-centered relations" (p. 86) of the disciplinary area. Critical Framing can also aid learners by providing a way to critique previous assumptions by thinking about them in new ways. Through engaging in practice of the first three factors, the fourth factor, Transformed Practice, is made possible. A focus of this factor is in transferring these critical, situated masteries of practice to new situations in a recursive manner. Transformed Practice gets at the crucial educational aspect of, for example, college students' ability to understand the traditions and rhetoric of different disciplines and work effectively within each. Using Transformed Practice, students construct new understandings from multiple contexts. For example, they may draw ties between ideas in their anthropology, psychology, business, and philosophy classes as they understand how and why homelessness (or another concept) occurs. The authors argue that through the juxtaposition and appropriate use of these four factors, students are able to achieve the two goals for literacy learning explicit in their model: "creating access to the evolving language of work, power, and community, and fostering the critical engagement necessary for them to design their social futures and achieve success through fulfilling employment" (New London Group, 1996, p. 60).

Cognitive. Cognitive views of reading processes also center on the complex nature of reading. Specifically, they focus on the interactive nature of knowledge, taking into consideration factors such as interest, strategies, domain specificity, and task. Implicit in this approach is self-regulation of cognition, which implies a pedagogical shift to foster student responsibility for planning, decision-making, and reflection (Mulcahy- Ernt & Caverly, 2009). This view of cognition must also include the importance of its situated nature: that effective instruction of reading strategies includes combining learning and doing within particular situations and within specific contexts (Brown, Collins, & Duguid, 1989). Situated cognition relates social, behavioral, and cognitive perspectives of knowledge and learning (Clancy, 1997) in which students work in communities of practice where learning is viewed as active participation and interaction (Barab, Warren, del Valle, & Fang, 2006; Lave & Wenger, 1991). Thus, in the developmental reading classroom, students learn best when learning is scaffolded, based in real-world tasks, and students are encouraged to generate solutions to problems (Brown et al., 1989).

Research on cognitive reading processes has discussed its complexity in terms of interactions between constructs. Compelling interactions have been indicated between knowledge and task (Simpson & Nist, 1997), knowledge and beliefs (Dahl, Bals, & Turi, 2005; Mason, Scirica, & Salvi, 2006), and knowledge and strategies (Hynd-Shanahan, Holschuh, & Hubbard, 2004). There is a growing body of evidence suggesting the importance

of knowledge of discipline-specific reading strategies (Shanahan, Shanahan, & Misischa, 2011). For example, a student reading science would need to understand how to read long noun phrases (the polymerase chain reaction laboratory technique), multi- morphemic vocabulary (microorganism), nominalization of verbs (photosynthesis, evolution), and purposeful use of passive voice to enhance objectivity (Fang, 2006; Shanahan & Shanahan, 2008). Although students may encounter these ideas in other disciplines as well, they are important to reading in science and students need to understand how being cognizant of the literacy conventions of the discipline is necessary for reading and learning within this domain.

To prepare students for the variety of disciplines, texts, and tasks they will encounter, instruction necessitates less focus on specific skills and more emphasis on the underlying processes needed to become a flexible reader by learning and understanding how, when, where, and why to use a variety of task-appropriate strategies that promote comprehension (Holschuh & Aultman, 2009; RAND Reading Study Group, 2002; Simpson & Nist, 2000). As we discuss in a subsequent section, explicit instruction of these processes—selecting, organizing, synthesizing, elaborating—may be more important and effective than teaching specific strategy heuristics (Holschuh & Aultman, 2009).

Metacognitive. Metacognitive reading processes are those that encourage students to understand and regulate their own cognitive abilities and skills (Paris, Lipson, & Wixson, 1983; Sperling, Howard, Staley, & DuBois, 2004). There is more to metacognitive reading than any one individual reading strategy or action. Readers who can reflect metacognitively about reading are able to detect contradictions or inconsistencies in text, can pull out important information, and can select different strategies depending on the text and the discipline (Alexander, 2005; Pintrich, 2002). Metacognitive readers understand that active reading consists of predicting, questioning, clarifying, and summarizing (Pressley, 2002). They also understand that they are responsible for monitoring their cognition and strategy use while reading (Winne, 2005).

Metacognitive knowledge has been shown to be a significant predictor of reading comprehension; however, students do not automatically develop useful metacognitive strategies with time or age (Baker, 2008). Pintrich (2002) noted that there is a "number of students who come to college having very little metacognitive knowledge; knowledge about different strategies, different cognitive tasks, and particularly, accurate knowledge about themselves" (p. 223). However, there is some compelling evidence that metacognition can be developed through instruction. Pressley (2000) noted that reading strategy instruction promotes metacognition when instruction includes an explanation and model of the strategy, offers opportunities for students to practice the strategy, and encourages reflection after reading. Metacognitive reading instruction focuses on comprehension monitoring, elaborating, and regulating strategies (Pressley, Gaskins, & Fingeret, 2006). Metacognitive reading can also be developed as students gain control of the strategies they use. Research has indicated that students can begin to question the influences of their own values and beliefs on their text interpretation as they become more adept at strategy use (Eckert, 2011).

Additionally, conceptualizations about literacy are part of the student knowledge base that educators should ideally take into account when planning instruction. This is important because how students understand literacy can affect how they approach reading, the strategies they use while reading, and what they expect to get out of a specific text (Goodman & Marek, 1996; Schraw & Bruning, 1996). Unfortunately, students' conceptualizations about literacy learning are often unclear or unarticulated, with potentially hindering consequences (Hardin, 2001). If students understand reading in one way, but evaluate it (or are evaluated) in a way that runs counter to their conceptualizations, there also develops an inconsistency in how they participate in literacy practices that contribute to their own reading development. Fortunately for college developmental reading instructors, conceptualizations are neither set in stone nor wholly external to the classroom, and can be shaped by the pedagogical environment (e.g., see Rasinski and DeFord, 1988). In the developmental reading classroom, conceptualizations of reading are found along multidimensional spectra of product and process views, positive and negative affect, and various frames that range from a journey to a sport to a relationship (Paulson & Armstrong, 2011). Understanding the range of conceptualizations by students, and working to generate understandings of literacy that lend themselves to effective practices, can be part of the metacognitive discussions instructors have with their students in developmental reading classes.

In addition to the general conceptualizations about literacy that students hold, they also bring a multitude of beliefs about specific concepts and disciplines (Nist & Holschuh, 2005) to each learning situation. These beliefs, which are impacted by prior domain knowledge and their general literacy conceptualizations, influence comprehension at all levels and may influence student interaction with text. Suppose a student holds a belief that everything contained in a textbook or on a printed page must be

true. That student would experience trouble reconciling multiple explanations or theories, which may result in comprehension difficulties (Schommer, 1994; Shanahan & Shanahan, 2012). Experts and novices have beliefs about text that cause them to respond to and interpret text in different ways (Hynd- Shanahan et al., 2004; Reisman & Wineburg, 2008; Shanahan et al., 2012; Wineburg, 1991). For example, expert readers believe that science text is approached differently than history text (Nist & Holschuh, 2005). However, many beginning college students do not share these beliefs. They may be unable to see the subtexts in history texts that are readily apparent to expert readers (Wineburg, 1991). Wineburg (1991) argues that for students to be able to detect subtext, an important literacy skill for reading history, students must have a particular epistemology of text—they must believe that these subtexts actually exist. Although many students enter our classrooms with relatively unsophisticated conceptions of knowledge, it is encouraging that beliefs about text can be positively impacted through instruction that includes providing background knowledge, modeling, making explicit ties to strategy selection, and opportunities for practice (Holschuh & Hubbard, 2013; Nist & Holschuh, 2005; Reisman & Wineburg, 2008).

Affective. There is an increasing body of support in the literature that focuses on the influence of affect in reading proficiency. Affective influences are tied to identity, as students must understand themselves as learners who can negotiate the complex, multifaceted literacy demands of college that involve much more than knowledge of specific, isolated skills (Paulson & Armstrong, 2010). Although there are many dimensions of the affective component, we address two major influences that are influenced by instruction: self- schemas about reading and motivation for reading.

Self-schemas, which are general characterizations individuals ascribe to themselves that are derived from past experiences (Ng, 2005; Pintrich & Garcia, 1994), are domain and context specific and are related to competency beliefs in that individuals have varying reactions to different domains based on past experiences (Linnenbrink & Pintrich, 2003; Ng, 2005). For example, a student who has experienced success in writing courses and low achievement in mathematics courses will have a more positive self-schema and higher self-efficacy about writing. Thus, affective influences can impact motivation for learning "by providing critical feedback to the self about the self's thoughts, intentions, and behavior" (Tangney, 2003, p. 384). College instructors often feel frustrated by the difficulty of motivating students to learn (Hofer, 2002; Svinicki, 1994), and some research has indicated that reading comprehension is directly tied to motivation through engagement (Guthrie, Hoa, Wigfield, Tonks, Humenick, & Littles, 2007).

Motivation can impact comprehension, but it also appears that setting the conditions for motivation can increase reading comprehension, especially for informative texts (Guthrie et al., 2007). Such conditions include giving students some choices on text and task (Turner & Patrick, 2008), setting reading goals based on content rather than skill building, and emphasizing a mastery approach to learning from text (Guthrie, Wigfield, Humenick, Perenevich, Taboada, & Barbosa, 2006; Linnenbrink & Pintrich, 2003). Additionally, Bray et al. (2011) found that having a variety of reading experiences (e.g., assigned and unassigned reading, library research experiences) were tied to growth in reading comprehension and promoting positive attitudes toward in the first three years of college. Creating an environment where choice/free reading for enjoyment is encouraged is an important element in promoting college readers' general reading proficiency and ability to navigate a variety of genres (Henry, 1995; Paulson, 2006). This perspective is based on the reality that fostering life-long reading practices goes beyond being a good textbook strategy-user. Not only does free-choice reading impact motivation (Turner & Patrick, 2008), but it also shows promise for helping second- language learners make gains in reading.

BEYOND HEURISTICS

A question many college reading instructors have asked themselves centers around whether there are certain reading strategies that are more effective than others, and the field has various empirical studies that focus on the efficacy of specific strategies (Caverly, Nicholson, & Radcliffe, 2004; Martino, Norris, & Hoffman, 2001; Perin, Bork, Peverly, & Mason, 2013; Snyder, 2002). Of course, problems manifest themselves when we reify a particular strategy as being equally useful to all students, or even equally useful in all reading situations. A specific strategy—like the nearly ubiquitous SQ3R— used successfully by one student in one course will not be effective when used by another student in another course due to the differences in text material, background knowledge, course focus, academic task demands, and a host of other contextual reasons. Beyond the utility of the strategy itself, if the student does not have metacognitive awareness of how and why the strategy works, when and in what circumstances to employ it, and how to adapt it for different purposes and different texts and situations, its effectiveness will vary widely. In many circumstances, efficacy may not be attributed to the strategy itself, but how it is understood and employed by students. If students are not aware of

the purpose of the strategy, how to employ the strategy in a variety of contexts, or how the goals of the instructor, course, student, and text author intersect, its effectiveness will diminish (Paulson & Bauer, 2011).

Compounding issues of strategy misapplication is the fact that there are easily hundreds of reading strategies available in publications, the Internet, professional development courses, and elsewhere. Instructors' decisions about which strategies to teach their students can be complicated. In fact, perhaps the question is not "what strategy is best" but rather "what aspects of reading strategies are useful." That is, it is important to focus not just on which specific strategies should be recommended, but also on the broad elements of effective strategies. To that end, Simpson and Nist (2000) reviewed the major research foundations for common processes within strategies, and grouped these aspects of strategies into four major categories.

The first category is question generation and answer elaboration. In this category of strategic processes, students create questions about the text in question and answer those questions themselves. This can take many forms, from individual work where a student creates and answers his/her own questions, or in a group or class configuration where students create questions that other students or groups will answer, all about a common text. It is important here that the questions and answers include more than just literal/factual aspects of a text but also include questions that necessitate critical thinking. The second category is text summarization. This is a straightforward process, but powerful in that it includes writing as a necessary component. The act of choosing the salient and most important parts of a text and re-phrasing, explaining, and describing that text for another audience is a complex process that involves critical reading and monitoring of comprehension. The next category is student-generated elaborations. This aspect involves students going beyond the text to make connections between it and other texts, their own lives, and other contexts. Creating examples and analogies of the information they find in their text is a route to critically examining the text and articulating its main theses. The final category is organizing strategies. This is a broad heading for many types of approaches designed to help students discover and understand the structure and content of a text. Strategies like concept maps and outlining are common examples of organizing strategies.

Note that a given strategy could be question generation and answer elaboration by itself, or a strategy could incorporate question generation and answer elaboration as one of the steps of a more wide- ranging strategy (such as in some versions of SQ3R— which is likely why that strategy, and others that are similarly widespread, continue to find new audiences).

Evaluating the potential effectiveness of a strategy— either a found strategy or one created by instructor or students— through the lens of these four broad descriptions of effective elements of reading strategies promotes understanding the important aspects of a strategy and whether it is likely to be useful. Other strategies that don't appear to incorporate any of these elements may be useful in certain contexts as well, but it is likely that the strategy may not have a solid research base underlying it, and it is important to examine what the strategy purports to do and whether there is any basis for those expectations.

INSTRUCTIONAL IMPLICATIONS OF THE MULTIDIMENSIONAL VIEW

Research indicates some general instructional principles that show promise. Using active, student- centered instructional approaches has been demonstrated to be effective with developmental learners (Boylan, 2003; Simpson & Nist, 2000). Using contextual, real-world text, rather than short, manipulated paragraphs helps students transfer their learning to their non-developmental classes (Simpson & Nist, 2000). Peer collaboration and focus on mastery learning has been tied to student engagement and motivation (Turner & Patrick, 2008). Culturally responsive teaching, which includes using cultural knowledge, prior experiences, and examples from many cultures (Gay, 2000), has shown potential for increasing student motivation and learning. We are encouraged by the direction the field is heading in terms of these approaches.

The Potential Terrain of College Reading

The unprecedented level of discussion about developmental education in the public eye generates some issues that we need to address as a field. First is the issue of the terminology we use to discuss students placed in developmental education courses. The terms "remedial" and "developmental" should not be used interchangeably (Arendale, 2005; Paulson & Armstrong, 2010). While remedial education focuses on students' deficits as learners, developmental education is a more comprehensive perspective that focuses on student development and sees our role as promoting and supporting academic success of all post-secondary learners (Arendale, 2005). These terms matter for developmental reading because one frame— remedial—takes the view that all those students who score below a certain level on a placement test are deficient in

some way and need to be re-taught how to read; curiously, if those students are not successful, the reading course itself is then described as a "barrier" to graduation for those students (Complete College America, 2012). The other frame—developmental—is one of access and success, where reading instruction provides a scaffolded bridge to college, which otherwise might deny admission completely, and other supports provide assistance beyond the classroom. Using the developmental frame impacts policy issues as well. If our view goes beyond a developmental reading course alone, then we can consider how reading connects to the department/university and larger, national policies and pressures.

Before looking at the effectiveness of developmental education in supporting students' matriculation and graduation, it is important to look at how colleges perform as a whole. In general, there is room for a great deal of improvement in graduation across the higher education landscape. NCES (2010) data indicate that only 29.2% of all students in a two-year college graduate with their associate's degree within three years of entry. Using a different time scale, Knapp, Kelly-Reid, and Ginder (2010) found that only 28.4% of all students in public, two-year institutions complete their degree or certificate within 200% of what they term the normal completion time. Note that these studies are not focused on students in developmental education courses, but rather include all students. Because higher education needs to address its overall graduation rates, we need to be aware that our goals for developmental education will have a ceiling of sorts: with non-developmental education students having difficulty graduating, expecting students who place into developmental education to outperform or graduate at higher rates than their classmates may be an unreasonable goal. Perhaps looking at college reading as one route to leveling the playing field for academic success is a more accurate expectation. Our goals, then, may be to examine what we can do to bring students needing college reading support up to a similar level of success of their classmates who did not place into developmental reading courses. Additionally, colleges must recognize the ways developmental education can support the learning efforts of the larger college population.

Nevertheless, the research literature has reported mixed results on the impact of developmental reading courses on graduation rates. Calcagno and Long (2008) found that developmental reading positively impacted some aspects of persistence, but only minimally impacted graduation rates in a large study of students in postsecondary institutions in the state of Florida. In a similar study in Texas, Martorell and McFarlin (2010) found that "the estimated effects of reading remediation on academic outcomes are small and statistically insignificant" (p. 22). However, both of these studies had a narrow focus on students scoring at or close to the cut-off for placement and did not look at the range of students who can benefit from college developmental reading. Other studies demonstrate success of developmental reading. In terms of graduation, analysis of NELS 88 data demonstrated that 40% of four-year college students who took developmental education coursework graduated with a degree (Attewell et al., 2006), and these percentages are higher for associate's degree attainment (see Education Commission of the States, 2012). For those who not only took, but also passed, college reading courses, the results are encouraging, as Attewell et al. (2006) point out: "For remedial courses in reading, we found that two-year college students who passed remedial reading were more likely to graduate than were academically and otherwise equivalent students who did not take remedial reading" (emphasis in original; p. 912). As Adelman (2006) asserts, "the evidence that students who successfully pass through remedial course work gain momentum toward degrees is beginning to build" (2006, p. 50).

Developmental reading is no longer thought of as merely a set of stand-alone courses as many institutions are questioning a "one-size-fits-all" approach, and current approaches focus on providing instruction in multiple ways (Schwartz & Jenkins, 2007). There have been a variety of new approaches to delivering developmental reading instruction including accelerated reading courses, integrated reading and writing courses, reading courses paired with a discipline course, reading labs (both online and face-to-face), tutoring models, learning communities, supplemental instruction, and so on. These changes are based on an understanding that there is not a single model for college developmental reading that will work in all contexts. Often students benefit from a combination of academic assistance in reading throughout their college careers.

When we consider the theoretical perspectives implicit in pedagogical approaches, the multidimensional nature of instruction and student learning, and institutional needs, we see two major shifts on the horizon for college reading: integrated reading and writing courses and the impact of widely-adopted academic standards—such as the Common Core State Standards—on college learning.

INTEGRATED READING AND WRITING

Because instruction in a language process must focus on all modes of that language in order to move toward proficiency, writing must also be included in reading instruction; as the adage goes, "you can't teach reading without teaching writing, and you can't teach writing without teaching reading." In other words, reading

and writing instruction should be integrated, and such integration can help "eliminate the artificial boundaries of current separated courses" (Fry & Ecung, 1998, p. 35) of developmental reading and basic writing.

The theoretical foundation for integrated reading and writing instructional models is not new, having been a part of the overall literacy field for decades (e.g., Shanahan & Lomax, 1988; Smith, Jensen, & Dillingofski, 1971). Early work focusing on integrated reading and writing in postsecondary contexts has also been useful (see Bartholomae & Petrosky, 1986), and programs in California and Ohio have focused on integrating reading and writing a variety of ways in developmental education contexts since the late 1990's (e.g., Goen & Gillotte-Tropp, 2003; Goen-Salter, 2008; Laine, 1997). Other programs that have received national attention have approached integration from an acceleration framework. For example, the California Acceleration Project views integrating reading and writing not only as pedagogically appropriate in the college context, but also as one way to shorten the time students spend in developmental education (see Hern, 2012; Hern & Snell, 2010). Moving students through preparatory sequences efficiently is important, as long as students' literacy experiences are not artificially truncated due to time; however, the primary reason that integrating reading and writing is beneficial is focused more on their shared social, cognitive, and language bases and pedagogical interrelatedness; that is, at its core is the perspective that as modes of language, they are inextricably related (Parodi, 2007) and should be approached as such in the classroom. As Quinn (1995) notes, the integration of reading and writing is supported by social-constructivist models of learning, in which reading and writing are both viewed "as social and cultural tools for acquiring and practicing learning" (p. 306). This does not imply that teaching writing is sufficient to automatically result in gains in reading, or vice-versa (Shanahan, 1984), but it does mean that the two should be focused on continuously, throughout a course of study, on every assignment and every text. Quinn summarizes this perspective, viewing reading and writing as a holistic act of literacy "with shared cognitive processes and, as such, should be taught together for the purpose of extending thinking, expanding learning, and transforming knowledge" (295-296). This integrated view of literacy may benefit the field as reading and writing taught together has the potential for greater gains in overall student learning.

IMPACT OF THE COMMON CORE STANDARDS ON COLLEGE READING: DISCIPLINARY LITERACY

The second major impact on the field is the movement toward widely adopted academic standards by educational and political organizations: specifically, implementation of the Common Core Standards. The Common Core State Standards for English Language Arts & Literacy in History/ Social Studies, Science, and Technical Subjects ("the Standards") are the culmination of an extended, broad-based effort to fulfill the charge issued by the states to create the next generation of K–12 standards in order to help ensure that all students are college and career ready in literacy no later than the end of high school. (http://www.corestandards.org/ ELA-Literacy). These standards, currently adopted by 45 states, embed disciplinary literacy into the majority of its ELA standards. Within the Common Core, disciplinary literacy has been proposed as an effective way to rethink the role of content area literacy in high schools (Shanahan & Shanahan, 2008).

Putting aside controversies about the pros and cons of widely adopted educational standards for the moment, it is important to examine potential effects of such standards. With its focus on "college and career readiness," the Common Core is poised to affect postsecondary education in ways atypical of most K-12 standards initiatives. The disciplinary literacy focus in the Common Core will likely impact the literacy expectations for learners at all levels, including at the postsecondary level. Disciplinary literacy emphasizes the knowledge, abilities, and unique tools that people within a discipline use to participate in the discipline (Shanahan & Shanahan, 2012). Disciplinary literacy makes the assumption that reading and writing tasks and processes differ based upon the demands, foci, and epistemology of the discipline. The aim is to identify the reading and writing distinctions among the disciplines and create instruction to help students successfully negotiate the literacy demands across disciplines (Shanahan & Shanahan, 2012). It is also tied to pedagogical content knowledge in that it involves ways teachers can construct teaching and learning with texts in their disciplines (Moje, 2007). This instruction seeks to make the disciplinary differences in reading and writing conventions explicit for students (Shanahan & Shanahan, 2008). Disciplinary literacy allows students to engage in deep learning within a specific context and involves reading, writing, and communication. What makes disciplinary literacy appealing as a way to integrate reading and writing in developmental education is twofold: it draws on the idea of d/Discourse (Gee, 2005) as disciplines have their own ways of knowing, using language, text, and evidence, and it prepares students for college success beyond the developmental education courses by teaching students to engage in the Discourse of the discipline.

Disciplinary literacy tasks allow students to experience rigor and cognitively demanding work in ways that are supported. "Embedding DL routines and relevant, challenging tasks into lessons are fundamental components of making equity and excellence attainable for every

student" (McConachie & Apodaca, 2009, p.166). One can imagine the impact of an integrated reading and writing developmental education classroom that taught students both reading and writing strategies to negotiate these different disciplinary literacy goals. For example, students could read several accounts of a historical event and write an interpretation of what happened. To do this they would need to be able to pull out the most important information in each text, summarize and synthesize across text, and write in a genre appropriate for the task, purpose, and audience. In sum, they would be working on the reading, writing, and vocabulary skills and strategies currently used in many developmental education reading and writing classrooms, but they would be employing meaningful purposes for engaging in literacy practices, which has been found to be an important consideration for student engagement in learning (Hull & Moje, 2012).

Conclusions and Suggestions for Research and Instruction

We conclude with some thoughts on future research and instruction. First, we concur with Simpson, Stahl, & Francis (2004) that it is time for a longitudinal look at the factors that promote success in college reading beyond the developmental reading courses. Unlike writing or mathematics where a grade in the next level course can be used for assessment, there are no easily apparent courses for evaluation in reading. Simpson, Stahl, & Francis (2004) call for an approach that focuses on factors that contribute to growth or change over a period of time, or the "why" questions. This is in contrast to the "what" questions that are often asked, such as retention in a course, standardized exam scores, or grade point averages. Many developmental reading program evaluations currently focus solely on the "what" questions, but longitudinal, sustained assessment will yield a more complete view of the impact of our efforts. Such studies may focus on instructional, pedagogical, content, or affect, and all would benefit the field.

Additionally, the field must consider policy issues. How does reading connect to departments, institutions, and national policies? How do the lenses we use to view college reading impact our approaches to instruction? There is a good deal of research needed on policy at college, state, and national levels.

Finally, we need to examine the impact of integrated approaches to reading and writing. We suspect that instructional models that creatively integrate effective approaches to reading with effective approaches to writing through a multidimensional literacy lens will benefit students more than an approach that merely assembles and combines current reading and writing course curricula. We also suspect that creating course objectives that go beyond course completion to college success beyond developmental education coursework will be more successful as well. However, research is needed to determine best practices.

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