

Content Area Reading Strategy Knowledge Transfer From Preservice to First-Year Teaching

In this study, the author analyzes four first-year teachers' in-class and out-of-class reading assignments and their choices and uses of reading strategies learned in their preservice program.

Christianna Alger

The 2007 Nation's Report Card revealed that 43% of the eighth graders who took the National Assessment of Educational Progress (NAEP) reading test scored at the basic level. This means that when given grade-level text, students scoring at the basic level have "a literal understanding of what they read and are able to make some interpretations" (Lee, Grigg, & Donahue, 2007, p. 38). In 2007, 26% of eighth graders scored below basic, suggesting that reading comprehension is a serious problem for many U.S. adolescents. One approach to improve the literacy of our middle and high school students has been to increase the course work required of preservice teachers to include content area literacy. The course commonly includes the goal of helping preservice candidates understand that teaching reading is the responsibility of all teachers, not just those that teach English. While these courses include conceptual ideas, such as reading is rooted in a sociocultural context, the bulk of the class is often devoted to teaching preservice teachers practical applications of research-based reading and writing strategies for integration into their content area lessons.

I teach such a course for secondary content area preservice teachers. In addition to strategy instruction, I also focus on the connections between social justice and literacy and encourage my students to consider how literacy empowers individuals. Generally, my students do well in the course. They are required to model a research-based strategy to their peers; complete an extensive case study of the reading attitudes, habits, and abilities of a middle or high school student; and write lesson plans and implement several of the strategies they learn in class in their student teaching placements.

Like any thoughtful teacher, I have concerns about the transferability of what my student teachers learn in my classroom to their own middle and high school classes once they leave the credential program. This article is an account of a study in which I followed four preservice teachers into their first year of teaching to trace the development of their thinking about literacy in relation to their content area teaching. I also tracked what and how much reading they

required of their students and the decision making and application of reading strategies associated with the assigned reading.

The guiding questions for the study were

- What and how much do the teachers ask their students to read?
- What reading strategies do teachers use, and why?
- What are the barriers to using reading strategies in content area classrooms?

I provide some background and describe the participants, the context, and the methodology for the study. After the analysis, I present the findings with recommendations for educators.

Background

Student Reading

Since the National Reading Panel's report (National Institute of Child Health and Human Development, 2000), there has been a lack of clarity regarding whether there is a correlation or causal relationship between reading practice and reading achievement. Common wisdom tells us, however, that practice is an essential ingredient for improvement of any task (Topping, Samuels, & Paul, 2007). It would seem that reading would be no exception. As a consequence, a reasonable question might be, in the case of reading, what constitutes adequate practice? As part of the 2007 NAEP, 28% of eighth-grade students reported that they read 25 or fewer pages per week in school and for homework (Lee et al., 2007). Twenty-four percent read between 30 and 50 pages per week. A disturbing finding is that the number of pages students report reading weekly decreased significantly from fourth grade to eighth grade. This trend continued into the high school years.

Teachers' Use of Reading Strategies

Though student teachers learn reading strategies, as evidenced through microteaching and lesson plan assignments, there is evidence that strategy instruction does not get transferred to their classrooms. Research indicates that while student teachers learn

these strategies in their preservice programs, they are resistant to using them in their classrooms. Bean (1997) suggested that several variables account for the lack of implementation of reading strategies by teachers. These include students' beliefs about discipline-based theories on learning, their cooperating teacher's style in the classroom, and students' beliefs coming into the teacher education program. There is also evidence to suggest that new teachers leave behind much of the knowledge gained in teacher education programs and instead adapt to traditional school practices (Korthagen & Kessel, 1999; Zeichner & Gore, 1990). In their review of the effects of teacher preparation programs on teachers' practice, Maloch et al. (2003) found that, of the few studies available, only one longitudinal study (Grossman et al., 2001) made a strong case for the connection between teacher preparation and practice.

However, Bean (1997) also noted that there is little follow-up research with student teachers with regard to their reading instructional practices once they leave preservice programs, and the few studies that do exist are focused primarily on elementary teachers (e.g., Pressley, Wharton-McDonald, Mistretta-Hampston, & Echevarria, 1998). Two notable exceptions follow.

One study (Barry, 2002) surveyed middle and high school credential program graduates on their usage of research-based strategies in secondary content area classrooms. Fifty percent or more of all responders indicated that they use a variety of reading strategies. Teachers reported that the barriers to using strategies included insufficient time to prepare, pressure to cover content standards, and in appropriate content area professional development.

A more recent study (Ross & McDaniel, 2004) of experienced elementary and secondary teachers enrolled in a reading master's program revealed that teachers implemented only a few key strategies in their classroom activities. After classifying reading strategies on a continuum of degrees of engagement with the text required by the teacher to implement the strategy, Ross and McDaniel (2004) found that teachers were more likely to use those strategies that required the least engagement and preparation.

Even in cases where teachers appear to be implementing reading strategies in their classrooms, the

An actual tracking system of the teachers' practice in addition to teachers' self-report was critical because in self-reports teachers had a tendency to inflate their use of reading strategies.

approach to strategy use can have very different purposes and consequences (Conley, 2008). For example, if a teacher uses a graphic organizer as a teaching activity to take students through a step-by-step process (e.g., students complete a teacher-created graphic organizer while teacher lectures), Conley (2008) labeled this a teaching activity. On the other hand, if the teacher models how to create a graphic organizer and then provides students with multiple texts to synthesize prior knowledge and new information through the creation of graphic organizers, Conley labeled it a learning strategy. In this case, the teacher has situated "graphic organizers as a component of students' cognitive toolkit" (p. 91).

Methodology, Data Collection, and Analysis

This is a descriptive case study of two biology teachers, Ed and Jackie (all names are pseudonyms), and two English teachers, Charles and John, over the course of the second semester of their first year of teaching. All four of the participants enrolled and successfully completed a course in teaching reading in the secondary school and received their teaching credentials in spring 2005 from the same institution. The teachers agreed to participate in the study because they believed that students' ability to comprehend content area text was important and that they had tools (in the form of strategies) to support their students' reading. All were in their mid-20s with teaching as their first career. None of the participants taught in the same school. For this study, each teacher chose to focus and gather data on one of his or her college preparatory classes that meet the requirements for entrance into the state university system.

Several types of data were gathered to gain a richer, more accurate picture of the participants' practices. An actual tracking system of the teachers' practice in addition to teachers' self-report was critical because, according to Ross and McDaniel (2004), in self-

reports teachers had a tendency to inflate their use of reading strategies. Therefore, I collected a minimum of 10 weeks' worth of consecutive lesson plans from the second semester of the participants' first year of teaching. Included were any supporting documents such as PowerPoint presentations and overhead transparencies, handouts and worksheets, and readings taken from the Internet and other reference materials. I observed each teacher once in the classroom and interviewed each teacher one to two times for approximately 45 minutes using a semistructured interview protocol. Before the start of the interview, each teacher completed a questionnaire indicating their familiarity with 20 reading strategies covered in their literacy course.

Where appropriate, simple statistics and counts were used to analyze the documents. All interviews were analyzed qualitatively through a process of identification of patterns and themes across cases. To ensure fidelity of findings, all of the interviews were coded by the researcher and a graduate student.

Participants, Contexts, and Texts

Ed, College Prep Biology

Ed taught at Washington High School, which was divided into several small schools. It was rich in diversity with approximately 20% of the students identified as Caucasian, 20% African American, 35% Hispanic, with the remaining 25% representing a variety of ethnicities. Seventy percent of the students were eligible for free or reduced-cost lunch, and the school had sporadic success over the last several years, meeting its Annual Yearly Progress (AYP) with fewer than 45% of the students scoring proficient on the English language arts standardized tests. Four of the 36 students in Ed's class were identified as English-language learners (ELLs), and seven had Individual Education Plans (IEPs). The class was a mixed-grade class with some students repeating the course.

Though the textbook was written at the ninth-grade level, Ed found that many of his 11th and 12th graders had difficulty making meaning of the text. "You could give them a paragraph with what you think is very clear explanations and then ask them a

question, and they can't pull the information out of the reading."

Jackie, College Prep Biology

In the border community where Jackie taught, more than 90% of the students attending Adams High School were Hispanic, with 75% of the student body eligible for free or reduced-cost lunch. The school had not met its AYP for three years, with 80% of its students scoring basic or below basic on English language arts standardized tests. There were 29 students in Jackie's class in grades 9–12, and all claimed Spanish as their first language.

Though the students in Jackie's school were predominantly ELL, she said that the students in her own class were not in need of bilingual services. Of their ability to read the ninth-grade-level biology book, she said,

You can't send them home with a reading assignment, knowing that they can read the words but not well enough to understand the content, so I do need to do additional things to make sure that they are reading and understanding. And a lot of times once they read and then I ask them what they read, and they have no idea.

Charles, Ninth-Grade College Prep English

Jefferson High School, where Charles taught ninth grade, was suburban with a student population of 50% Caucasian, 30% Hispanic, and the remaining 20% a mix of ethnicity. Fewer than 20% of the students were eligible for free or reduced-cost lunch. The school met its AYP goals for the two years prior to the study, with more than 50% of the students scoring Proficient or Advanced on English language arts standardized tests. In Charles's classroom, there were 37 students; 4 identified as ELL with one student on an IEP.

Charles did not use a standard textbook in his class. Instead, students read nonfiction texts such as Eric Schlosser's *Fast Food Nation* and fictional texts such as John Steinbeck's *Of Mice and Men* and William Shakespeare's *Romeo and Juliet*. Charles estimated that seven or eight of his students read at or below the seventh-grade level.

John, Tenth-Grade College Prep English

Although John taught in a rural setting, he indicated that the term is misleading; the school shared many of the same problems faced by urban schools. At Madison High School 60% of the students were Caucasian, almost 30% were Hispanic, and a large proportion of the remaining 10% were Native American. Less than 50% of the students qualified for free or reduced-cost lunch. Over the past two years, the school met its AYP with approximately 45% of the students scoring Proficient or Advanced on English language arts standardized tests. The 32 students in John's tenth-grade English class were reflective of the school demographics.

Like Charles, John used a variety of literary genres, including fictional texts such as Steinbeck's *Of Mice and Men*, John Knowles's *A Separate Peace*, and Shakespeare's *Julius Caesar* as major texts. In addition, he used a text focused on writing essays. John indicated that he had "plenty of problems" getting his students to read and that there was probably a correlation between the seven or eight students earning Ds and Fs and their below-grade-level reading abilities.

Findings

Reading Opportunities: What and How Much Do the Teachers Ask Their Students to Read?

Before analyzing the strategy use of the teachers, I analyzed the opportunities for reading in each course. Using lesson plans, student notebooks, handouts and worksheets, and PowerPoint and overhead materials, I determined an average number of pages of required in- and out-of-class reading per week. It is important to note here that I acknowledge that with regard to print and text, we are in a sea of change. We are moving from the "dominance of the medium of the book to the dominance of the medium of the screen" (Kress, 2003, p. 1). The screen—whether computer, television, or video—is providing many new modes for subject matter to be represented, including still images and moving images (Bezemer & Kress, 2008). The concept of "literacy" is in flux. In addition, many believe that the use of a single print text is insufficient for meaning making and engaging adolescents in content area classrooms (Walker & Bean, 2005). To their credit, the study participants used a variety of modes

to represent content area knowledge, including print in textbooks, trade books, and handouts as well as images and text on PowerPoint and the Internet.

To quantify and make sense of the reading required of students, I used “pages of text required” as the medium of comparison. Text pages included both in- and out-of-class reading assignments in textbooks or other trade books. Handouts included articles from the Internet or expository text from other reference materials. Each overhead or PowerPoint slide counted as one page. Worksheets had to have a minimum of 50 words to be counted as a page. In cases where worksheets had fewer than 50 words, they were combined to count as one worksheet. Table 1 shows the average number of pages of weekly required reading in the four participants’ classrooms.

The biology classes were very similar in the number of pages of required reading for text and handouts. While the average number of pages in the third category is substantially higher for Jackie’s class, most of the difference occurred as a result of Jackie’s use of PowerPoint slides, which were rich in visuals that both supported students’ meaning making as well as motivated them. For example, she included a picture of a woodpecker to demonstrate “directional selection” and embedded cartoons connected to the content to capture the students’ attention. In Ed’s case, the district expects all teachers to follow a pacing guide based on the textbook. Given that most biology textbooks are a minimum of 400 pages and students were asked to read approximately 3 pages per week, it is likely that Ed’s students only read approximately 20 to 25 percent of the textbook over the course of the year.

The two English classes were also similar in the reading opportunities afforded students. While there are “certain commonalities in their use of academic language,” Shanahan and Shanahan (2008) stated that disciplines are unique “in how they create, disseminate, and evaluate knowledge, and these differences are instantiated in their use of language” (p. 48). These differences may account for the fact that reading opportunities of text or trade materials were four to five times greater in the English than the biology classes, whereas biology students were more likely to read text from handouts than students in English classes were. It should be mentioned that both English teachers taught a unit of writing during the weeks of collected lesson plans. As such, it is possible that over the course of the year, students may average more pages per week when writing is not a focus. It is interesting to note that even with the different contexts (e.g., suburban and rural), the reading opportunities are very similar across all four cases.

Strategies for Engaging the Students in Reading: What Reading Strategies Do Teachers Use and Why?

At the time of the interview, participants were asked to rate their level of knowledge of 20 reading strategies, ranging from no knowledge to having used the strategy in the classroom. The list for the initial strategies was generated from the curriculum and materials from the participants’ content area reading course. Answers indicating strategy use were then cross-checked against the submitted lesson plans for accuracy and clarified during the interview process.

Table 1 Average Number of Pages of Reading Required Per Week

Type of text	Ed (Biology)	Jackie (Biology)	Charles (English)	John (English)
Textbooks and trade books	2.7	2.8	16.4	13.9
Handouts	2.0	3.0	.4	1.0
Overhead/PowerPoint slides/worksheet	4.0	17.6	14.2	22.0
Weekly average of pages	8.7	23.4	31.0	36.9

Table 2 Classroom Strategy Use by Participants

Strategies	Ed (Biology)	Jackie (Biology)	Charles (English)	John (English)
Cornell Notes	X	X	X	X
Graphic organizers	X	X	X	X
K-W-L chart	X	X	X	X
Concept maps	X	X	X	X
Writing to learn	X	X	X	X
Interactive reading guide	X	X	X	
Concept definition mapping	X	X	X	
Directed Reading–Thinking Activity (DRTA)		X	X	
Learning logs				X
Structured note taking		X		
SQ3R		X		
Word family trees	X			
Question-Answer Relationship (QAR)				X
Total number of strategies used	8	10	8	7

See Table 2 for details about which strategies were used by the participants.

Thirteen of the 20 possible strategies were used by at least one of the participants. The number of strategies used by the biology and English teachers was similar, ranging from 7 to 10. All participants used Cornell Notes, graphic organizers, K-W-L charts, concept maps, and writing-to-learn strategies. In addition, none of the participants surveyed their students regarding their reading habits, likes and dislikes, or administered a cloze procedure to determine the fit between the text and the students' reading abilities, all of which were included in the curriculum of their reading course.

Cornell Notes implemented by all four teachers and was the most frequently discussed strategy during the interviews. In two of the schools, Cornell Notes had been adopted schoolwide as part of the Advancement Via Individual Determination (known as AVID) program. In Ed's class, students were expected to read for homework from $\frac{1}{2}$ to $1\frac{1}{2}$ pages of the text three nights a week and take notes us-

ing the Cornell Notes format. When asked if students completed the Cornell Notes, Ed said,

Yes, whether (the students) can read or not. What happens a lot is they look for the definitions (of the key terms) in the back...I wish they didn't have definitions in the back of the book cause they don't know what those definitions mean at all...sometimes the kids write good summaries, but sometimes they write the summary and you can tell that there's little comprehension.

Jackie used a similar format to Cornell Notes. Students used a two-column system with one column representing evidence they gleaned from the text and a second column representing the students' interpretation of the evidence.

The participants understood the value of sparking prior knowledge, as evidenced through their use of what they interpreted as anticipation guides and K-W-L, both strategies they claimed to have learned in their Teaching Reading course. For example, Charles had students create K-W-L charts on controversial topics as part of a unit on persuasive essays. In an analysis of the lesson plans, however, I found no

evidence of the use of anticipation guides. What I did find were examples of the teachers using anticipatory sets to begin their lessons.

When originally identifying their strategy knowledge base, a couple of the participants did not indicate that they used concept maps or graphic organizers. However, after analyzing the lesson plans, it was clear that all four used some form of both. In most cases, the handouts originated from supplemental materials associated with the text or from the Internet. For example, Jackie used graphic organizers to help students understand the oxygen cycle and the heart. John used a Venn diagram to compare character traits.

All four of the teachers asked their students to write not only to learn but also to show what they know. They indicated that they learned some of these strategies in their credential courses and from colleagues, and some they developed themselves. For example, Ed had students create a travel brochure for a tour of the human body system. Jackie often had a short provocative science reading on the board when her students came in and asked them to respond in writing to the reading.

Three of the participants used interactive reading guides and concept definition mapping. Interactive reading guides were often developed by the teacher rather than from supplemental materials associated with the textbook publisher. Ed had his students develop concept definition maps of words associated with cells (e.g., *mitochondria*) by having them develop the definition, characteristics, examples, and nonexamples.

Strategies for Not Engaging Students in Reading: Workarounds

Though the teachers did not do any formal or informal assessments of their students' reading abilities or of the fit between the texts and the students, the teachers did have the sense that a good number of their students could not be expected to complete independent in-class and out-of-class reading assignments. All four of the participants expressed frustration about getting their students to complete and comprehend assigned reading. Ed explained that he did not assign more than 1½ pages at a time because he believed that the students would "get lost."

Data revealed that the participants not only had strategies for engaging students in reading but also strategies to ameliorate the necessity for students to have to read text independently. These strategies, some of which were taught during their preservice teacher program as alternatives to round-robin reading, operated as workarounds when they were overused. Lecturing, PowerPoint presentations, reading aloud to the students or playing a tape of the reading, assigning small segments of reading to the whole class, and dividing the reading among classmates are activities and strategies that should be in any teacher's repertoire. However, when they are used to avoid or replace independent content area reading, they become workarounds.

Both biology teachers considered the textbook as very difficult for their students to read, and because of this, did not view the textbook as a major source of transmission of information but rather as a reference text. Therefore, instead of having the students read the textbook, the teachers transmitted important biology concepts through lecturing and PowerPoint slides, thus creating workarounds to the students' reading of the text. In the fall of her first year of teaching, Jackie assigned reading of the textbook for homework but found that few of her students completed or comprehended the material. During the spring semester, she taught her students SQ3R (Survey, Question, Read, Recite, Review), an excellent comprehension strategy. Breaking the class into groups, she assigned each group a one- to three-page segment of a chapter from the text to read and apply SQ3R. Using a jigsaw format, Jackie created cooperative groups that read and became experts on one small section of text and then taught it to other groups by exchanging information and notes. In doing so, Jackie scaffolded the reading of the text and at the same time substantially reduced the amount of independent reading required of the students. Whether it was because the fit between the text and the students was so far off the mark or whether it was a matter of teacher choice, what is notable here is that the students never moved beyond the scaffolding to independent reading and learning.

Workarounds for the English teachers were more problematic. At times Charles and John assigned students to independently read chapters of literary works

in class and for homework. For example, during the reading of *A Separate Peace*, John split the approximately 20 pages per week of reading between in-class time and homework. John assigned chapter summaries not as a comprehension strategy but as a form of accountability. Very frequently, however, rather than assigning the reading as an independent homework or in-class activity, the English teachers read aloud to their students. Charles read all of *Of Mice and Men* aloud to his students. For the Shakespeare plays, both Charles and John read aloud to their students and played publisher-provided audiotapes while students followed along with the text. Charles said, “I never made [the students] read it at home alone.” The communication here is that the students are not able, and therefore should not be expected to grapple with Shakespeare on their own.

After being chastised by his principal for reading aloud to his students, Charles’s students read the majority of Schlosser’s *Fast Food Nation* for homework. Charles acknowledged that the students found the text “dense and difficult.” He originally scaffolded the reading by developing study guide questions that the students were required to answer as part of their homework. His administrator discouraged this practice as well. In response, Charles moved to assigning the reading and then the following day having students discuss the reading in groups. Using this format, it became very difficult for Charles to determine who had and had not done the reading from who was not *able* to do the reading.

Discussion and Recommendations

This study began with my concerns regarding the transfer of strategies learned in my preservice course to secondary classrooms. Clearly, some transfer occurred. The participants seemed to learn to employ various strategies, but they have missed the big point of their preservice course in content area literacy—that along with teaching their students the content, they are also teachers of reading as it pertains to their discipline.

The number of pages students read in and out of class is shocking, particularly for college preparatory courses, if one is not familiar with the NAEP’s student self-reports of number of pages read per week

inside and outside of school (cited earlier in this article). Between the biology class and the English class, students would read approximately 18.8 pages a week for these two classes alone. If those same students were enrolled in a social science class, it is reasonable to assume they would be required to read from some text as well, thus raising the number of pages read to perhaps 25 per week. Is this an adequate number? Does it constitute enough “practice”?

The use of strategies may be connected to the small number of pages of text the teachers required of their students. Given the few opportunities students had to read text—and with the workarounds—it is not surprising that teachers’ use of strategies was limited. These two conditions—few pages read and few strategies employed—leave one with questions: How will our students become better readers? How will they advance to college-level reading?

Strategy use by first-year teachers is much more complicated than simply a count of use or nonuse. Looking at the source of the materials and the reasoning behind choices revealed that when the participants did employ reading strategies, their decision-making regarding strategy use was not primarily motivated by the need to improve students’ reading comprehension of content area text. Rather, strategy choice was a matter of organizing information, a form of accountability, or a mechanism to reduce the amount of reading required by the student. Inadvertently, the teachers were “doing pedagogy co-opted for purposes of handing down authoritative knowledge from textbooks” (Conley, 2008, p. 98). In addition, as Ross and McDaniel (2004) suggested, the strategies used by the participants required minimal engagement with the text by the teacher, and, unfortunately, also by their students.

It is important to highlight that many of the activities and ideas of these first-year teachers were excellent. The care that went into their lessons is laudable. Each lesson was grounded in the state content standards, and the plans indicated that the participants made many efforts to engage students in learning. The interviews were replete with examples of how much the teachers cared about their students.

The participants took very seriously that all of their students should learn the content standards.

They worked around the necessity for their students to read for all of the right reasons—because their students either could not or would not read the textbook. By becoming the main conduit for information, the participants tried to ensure that they did not leave any child behind. In so doing, however, opportunities for students to become better readers of discipline-related materials were limited, making autonomy in their learning less likely.

This is a case study of four teachers in different contexts. Therefore, generalization is not possible. However, looking across the cases is suggestive of some recommendations for the educational community.

With the prevalence of technology as a possible source of information and middle and high school students' facility with technology, the notion of the textbook is rapidly becoming outdated. Recent research indicates that content area teachers are moving from a single textbook focus to using multiple texts to teach content (Walker & Bean, 2005). While many teachers currently use textbooks as reference tools only, many districts are developing pacing guides based on textbooks. These two notions seem diametrically opposed. Given the ranges of students' reading abilities and language fluency—and our understanding of adolescent literacy—time might be better spent developing multiple text sets. These would provide students with multiple entries to learning and would encourage critical reading and discourse.

None of the participants were aware of any articulated schoolwide plan for literacy. And none of the administrators or mentors talked with the first-year teachers about how to deal with multiple reading abilities and, the language fluency of their students. New teachers are often overwhelmed in their first “real” job and quickly adapt to the culture and climate of their new school, often leaving learned practices and the discourse of the preservice program behind. More discussion and modeling by administrators and mentors is needed—not only of actual practice but also the thinking around the practices of informal assessment and embedding reading strategies within content area lessons.

As a teacher educator, I am currently restructuring my course to focus on the essential questions each preservice teacher must ask him or herself, such as: If

reading empowers and enfranchises individuals, what is my responsibility as a content area teacher to ensure that my students are empowered and enfranchised? What does content area literacy look like in my discipline? What will be required of me to ensure that a variety of content area texts in multiple genres are accessible and comprehensible to all of my students? How can I take advantage of the new literacies to engage my students in meaning making? I am placing less emphasis on strategies per se and more emphasis on assessment of students' reading abilities and the fit between those abilities and text. I am searching for ways to affect student teachers' mindsets so that reading strategies are implemented as learning tools, not teaching tools (Conley, 2008). Finally, I provide opportunities for student teachers to create multiple text sets for use in constructivist and inquiry-based ways (Walker & Bean, 2005).

On the first day of class, I always ask for a raise of hands of those who plan to teach English, history, math, science, art, and music. Students eagerly raise their hands as their content area is called out. When I ask who plans to teach reading, not a hand is raised. At the end of the course, when I ask the question again, while there are always a few holdouts that believe all students should be able to read when they get to middle and high school, most of the students raise their hands. I want to make sure that if I were able to ask that question a year later, I would see those same hands and maybe even more.

References

- Barry, A.L. (2002). Reading strategies teachers say they use. *Journal of Adolescent & Adult Literacy*, 46(2), 132–141. doi:10.1598/JAAL.46.2.4
- Bean, T. (1997). Preservice teachers' selection and use of content area literacy strategies. *Journal of Educational Research*, 90(3), 154–163.
- Bezemer, J., & Kress, G. (2008). Writing in multimodal texts: A social semiotic account of designs for learning. *Written Communication*, 25(2), 166–195. doi:10.1177/0741088307313177
- Conley, M.W. (2008). Cognitive strategy instruction for adolescents: What we know about the promise, what we don't know about the potential. *Harvard Educational Review*, 78(1), 84–106.
- Grossman, P.L., Valencia, S.W., Thompson, C., Martin, S.D., Place, N., & Evans, K. (2001). Transitions into teaching: Learning to teach writing in teacher education and beyond. In C. Roller (Ed.), *Learning to teach reading: Setting the research*

- agenda (pp. 80–99). Newark, DE: International Reading Association.
- Korthagen, F.A.J., & Kessel, J.P.A.M. (1999). Linking theory and practice: Changing the pedagogy of teacher education. *Educational Researcher*, 28(4), 4–17.
- Kress, G. (2003). *Literacy in the new media age*. London: Routledge.
- Lee, J., Grigg, W., & Donahue, P. (2007). *The nation's report card: Reading 2007 (NCES 2007-496)*. Washington, D.C.: National Center for Education Statistics.
- Maloch, B., Flint, A.S., Eldridge, D., Harmon, J., Loven, R., Fine, J.C., et al. (2003). Understandings, beliefs, and reported decision making of first-year teachers from different reading teacher preparation programs. *The Elementary School Journal*, 103(5), 431–457. doi:10.1086/499734
- National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office.
- Pressley, M., Wharton-McDonald, R., Mistretta-Hampston, J., & Echevarria, M. (1998). Literacy instruction in 10 fourth- and fifth-grade classrooms in upstate New York. *Scientific Studies of Reading*, 2(2), 159–194. doi:10.1207/s1532799xssr0202_4
- Ross, P., & McDaniel, C. (2004). The impact of clinical experience on the reading comprehension instruction of K–12 inservice teachers. *National Reading Conference Yearbook*, 53, 321–341.
- Shanahan, T., & Shanahan, C. (2008). Teaching disciplinary literacy to adolescents: Rethinking content-area literacy. *Harvard Educational Review*, 78(1), 40–59.
- Topping, K.J., Samuels, J., & Paul, T. (2007). Does practice make perfect? Independent reading quantity, quality, and student achievement. *Learning and Instruction*, 17(3), 253–264. doi:10.1016/j.learninstruc.2007.02.002
- Walker, N.T., & Bean, T.W. (2005). Sociocultural influences in content area teachers' selection and use of multiple texts. *Reading Research and Instruction*, 44(4), 61–77.
- Zeichner, K., & Gore, J. (1990). Teacher socialization. In R. Houston (Ed.), *Handbook on teacher education* (pp. 329–343). New York: Macmillan.

Alger teaches at San Diego State University, California, USA; e-mail calger@mail.sdsu.edu.

Copyright of Journal of Adolescent & Adult Literacy is the property of International Reading Association and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.