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Proven Programs, Profits, and Practice

Ten Unprofitable but Scientific Strategies for Improving Reading Achievement

RICHARD L. ALLINGTON

University of Tennessee

The passage of the most recent reauthorization of the Elementary and Secondary Education Act of 1966 (ESEA)—the No Child Left Behind Act of 2001 (NCLB)—has introduced a new twist in federal educational policy. While NCLB has several unique features, it largely represents an intensification of a forty-year-old federal policy of top-down management and centralized decision making.

Since its origination, ESEA legislation has provided funding with strings attached. It is, for instance, the ESEA that has been identified as the primary cause of the expansion of standardized testing in U.S. schools (Timar, 1994), since accepting federal dollars has long meant collecting achievement data in an attempt to document that the added funding enhanced student achievement, particularly in reading (Allington, 2002). Federal funds have always come with limits on how those funds could be spent. But recent federal legislation has added a new layer of centralization: the mandated use of research to justify the expenditure of federal funds.

Unfortunately, much of the research available seems to be largely neglected in federal policy making. In this chapter I explore both the shifts in federal policy and the selective focus on specific research findings while neglecting other research findings. I will suggest that federal policy making, and thereby educational practice, has been shaped by the profit potential inherent in some research findings that is not a characteristic of the neglected research findings.

A Short Recent History of Federal Policy Making Concerning Reading Education

Only recently have federal policy makers begun to include "research-based" concerns in educational programs legislation. It seems that the Comprehensive School Reform and Development (CSRD) legislation of 1997, an extension of the earlier Goals 2000 legislation crafted during the administration of the first President Bush and continued during the Clinton administration, was the first federal policy that specifically required research-based designs to qualify for federal funds. The CSRD provided funding for school districts that adopted one of several whole-school reform designs. The available options were those "research-based" programs that had survived the New American Schools (NAS) competition established in the early 1990s to find "systemic" reform efforts that reliably improved student achievement. Thus, school districts could apply for the CSRD funding to implement reform models such as Success for All, Comer School Development, Accelerated Schools, and so on. The ten-year evaluation of these federal efforts to improve achievement, primarily in high-poverty schools, found that "the original hypothesis, that by adopting a whole-school design a school could improve its performance, was largely unproved" (Berends, Bodilly, & Kirby, 2002, p. 173). In other words, the evidence, after a decade, indicated that none of the reform models reliably enhanced reading achievement across all sites although each model had some successes.

Perhaps buoyed by early reports from the entrepreneurs (e.g., Siegfried Engelmann, Robert Slavin, Ethna Reid, James Comer, McGraw-Hill, Great Books Foundation), many that had developed one of the ten CSRD models, the Reading Excellence Act of 1998 (REA) was passed during the Clinton administration. The REA specified a continued emphasis on the use of "innovative strategies and proven methods . . . based on reliable research . . . replicated successfully in schools." Thus, state applications for federal funds had to specify a research base for their plans to spend federal moneys and school districts had to likewise specify a research base for their plans. The American Federation of Teachers (1998) chimed in with a listing of seven "proven programs" for fostering reading achievement. Then came the NCLB, with a tighter focus on funding only those plans that "employ proven strategies and proven methods . . . based on scientifically-based research . . . replicated successfully in schools." Thus over the course of a decade or so, federal policy makers adopted a model for reform that increasingly limited the options available for spending federal dollars to those efforts that could be justified from the available research evidence. And the notion that there were proven programs emerged in federal policy.

Today, *evidence-based instruction* is the hot new buzz phrase out of Washington. As a researcher I suppose I should be pleased. But I'm skeptical instead. I'm skeptical because as a researcher I'm well aware of the limitations of research in providing clear answers about what works. Four problems plague any attempt to translate research findings into guidelines for educational practice.

The Limitations of Research

The first problem is that of the contingent nature of research evidence. Scientific evidence most often indicates that *it depends*. Will reducing class size improve achievement? Usually, yes but you see, it depends. It depends on whether teachers work in an organizational system that allows them to take advantage of smaller classes. One-size-fits-all textbook adoptions, for instance, work against the success of smaller classes because it means that teachers still must teach against an organizational grain if they are to provide lessons that a range of kids will successfully experience. It depends not just on whether the teacher has the autonomy to create tailored lessons but whether the teacher has the expertise and initiative to do so. The generally favorable impact of class size reduction reported in the literature indicates that many teachers have the autonomy, expertise, and initiative to design and deliver appropriately tailored instruction. But that same literature shows that achievement does not necessarily improve in *all* classrooms when smaller classes are provided. It depends.

A second problem is that statistical differences in average achievement outcomes between control and treatment groups might be so small as to be of little practical significance. Venezky (1998) noted that Success for All raised achievement significantly but very modestly such that the majority of students were two or more years below grade level at fifth grade. The smallish differences were magnified by the six-year treatment costs associated with implementing the model.

That leads to a third concern. The most popular methodologies in the federally defined scientific research make use of mean statistic comparisons to indicate which instructional plans work better. In other words, the scientific research mandated in federal law for evidence-based instruction typically tells us which instructional approach or plan worked better, *on average*. On average, for instance, reducing class size does improve achievement, but it does not improve the achievement in all classrooms nor for all students.

There are many ways to impact average achievement, and a rise in average achievement does not mean that the benefits observed benefited all subjects equally. For instance, we might develop an intervention that raises the achievement of only the top 20 percent of students. That would raise average achievement. Or maybe our approach raises the achievement of only the

lowest-achieving 20 percent. That too would raise average achievement. Or we might raise the best students' scores by ten points while also lowering the worst students scores by five points. Still, average achievement would rise.

The point is that raising average achievement in a research study might benefit some subgroups (or penalize them) without having a generalized positive effect on achievement. A statistically significant rise in achievement does not necessarily raise all ships. It might raise only the yachts. Current research methodologies too rarely report on whether the effects benefited only some subgroups (Torgeson, 2000). In far too many of the intervention studies with struggling readers, for instance, a quarter or more of the students benefited hardly at all.

The final problem is that most research fragments the curriculum and the act of teaching. That is, we have many more studies of the impact of adding a specific routine to a lesson than we have studies of complete reading programs. We have more research on adding a brief demonstration of a decoding or vocabulary development or comprehension strategy to a reading plan than we have demonstrations of the impact of a full reading curriculum. And even when we have an analysis of a full reading program, we have virtually no studies that systematically manipulated the several components of any program to attempt to identify those components most useful in developing reading proficiency (Pressley & Allington, 1999).

So we have lots of studies, mostly short-term, that suggest that adding a bit of this or that improves some students' learning of this or that. This sort of research can be useful but it can also be misleading because we are always adding a bit of this or that to some larger set of reading instructional and practice activities that are rarely well documented. And we never really know whether there might be other things that we could add, or variations on what we added, that would prove even more useful.

Evidence and Entrepreneurship

There is yet another issue that is troubling and that seems to introduce a bias into the equation whenever reforms—evidence based or not—are initiated. This issue is one that might be described as the power of profit potential. Both for-profit corporations and individual entrepreneurs figure into this.

Large corporations exist to generate a profit for shareholders. This point was driven home at a conference on the reading wars sponsored by the Brookings Institution and held at Harvard University in the fall of 1999 (Loveless, 2001). I presented data illustrating the various and numerous links between researchers, one large corporation, and educational reform initiatives in California and Texas. I suggested that policy making in these two states

seemed to have been heavily influenced by entrepreneurial researchers who worked for the corporation to the benefit of that corporation. I suggested that only some research was highlighted and that corporate entrepreneurs were situated to shape these states' policies on reading instruction through multiple statewide conferences and by developing policy statements for the state education agencies. That seemed an important phenomenon to me.

When I was finished, the first question I was asked was, "So what's your point?" I reiterated what I thought was the primary point, corporate influence on state educational policy making, and the questioner responded, "Yes, I heard that, but what's the problem?" He then went on to argue that a corporate head had a fiduciary responsibility to shareholders to attempt to maximize corporate profits and that successfully influencing state educational policy to benefit the corporation would indicate that he accomplished, in fact, just what was expected of him. I paused.

I guess he was correct. I also knew that this was a line of thinking that had never occurred to me. In other words, it was but a variation on the old "What's good for General Motors is good for America" theme. But I was worried more about was good for students and teachers than about what was good for shareholders. It wasn't even that this corporation produced a terrible product because, truth be told, it produces an array of reading curriculum products that represent a wide range of orientations. What bothered me was the notion that corporate profits were the bottom line.

I've thought about this exchange for a while now and I'm still convinced that what's good for corporate America is not always, or maybe even typically, what's good for students and their teachers. I've also begun to wonder how an emphasis on profit potential might shape the sorts of evidence that get used in decisions about the design of reading instruction. I've concluded that evidence that can be translated into a profit center seems more likely to be highlighted than evidence for which there seems to be little profit potential.

I know of no way of proving this hypothesis, so here I resort to providing evidence on ten instructional practices that have garnered sufficient research to suggest the practices can be considered research based. I suggest that one of the reasons there seem to be few proponents of these ten evidence-based practices is their lack of profit potential.

Ten Research-Based, Low-Profit Potential Practices

Writing, Sound Stretching, and Phonemic Awareness

Much has been made of the importance of the development of full phonemic segmentation as an early literacy proficiency. The now infamous "phonological

core deficits" have been tapped as the major source of difficulty in early reading failure (Lyon, 1996). Perhaps. But why has the scientific evidence on what may be the most powerful instructional activity for fostering phonemic segmentation been largely ignored? Two recent empirical studies (McGill-Franzen, Allington, Yokoi, & Brooks, 1999; Scanlon & Vellutino, 1997) have demonstrated that when kindergarten teachers promote early writing activity, encouraging invented spelling, growth in phonemic segmentation—the ability to isolate individual phonemes, or sounds, in words—is reliably and readily developed. This is especially true when teachers demonstrate sound stretching as they write the morning message and interactive chart stories and whenever they compose in front of their students.

In the McGill-Franzen et al. (1999) study, kindergarten teachers were randomly assigned to training (or not) on how to use early writing both to foster early literacy development and agency and to track student development as part of a larger kindergarten reform effort. Students from the classrooms of the teachers who were exposed to this training significantly outperformed children from the other classrooms on virtually every literacy measure and specifically in their ability to identify individual phonemes in spoken words. In the Scanlon and Vellutino study (1997), kindergartners identified as at risk of early literacy failure who were enrolled in classrooms where teachers promoted early writing with sound stretching obtained significantly higher phoneme awareness scores at the end of the year while the amount of phonics instruction had no observed effect. The researchers also noted,

> of all the varied foci of language arts instruction in kindergarten, only the proportion of time devoted to focusing on the internal structure of words reliably distinguishes between groups of at-risk children who differed on reading achievement at the end of first grade. . . . It should also be noted that none of the teachers were employing any of the experimental or published programs currently available for training in phoneme awareness. Rather, phoneme awareness activities generally occurred in the context of writing, typically as sound analysis in the service of "figuring out" the spellings of words used in more meaning-based writing activity. (p. 204)

It is hard to make a profit from encouraging teachers to promote early writing activity even with demonstrations of sound stretching.

Word Walls

Word walls are teacher constructed and present high-frequency words, primarily, that children will encounter often as they read and write. Making a word wall requires only that the teacher have access to card stock (on which

the words are written), some tape, and a marker or two. But word walls provide scaffolding for early readers and writers, a tool that allows them to self-monitor both reading and spelling, and works to develop the instant recognition of those high-frequency words that are not decodable but appear in nearly every sentence we read or write. Cunningham (2004) summarizes the research on this inexpensive classroom instructional tool. She notes that word walls (1) develop sensitivity to orthographic structure, to the internal structure of words, (2) foster instant word recognition, and (3) promote self-regulation in both reading and writing. Each of these proficiencies is an important component of early literacy development.

Just Plain Writing

Somehow the National Reading Panel (2000) failed to examine the research on the role writing can play in reading development (Pressley, Dolezal, Raphael, Mohan, Roehrig, & Bogner, 2003). It seems that since the NRP didn't report the rich research on reading-writing reciprocal relationships (Tierney & Shanahan, 1991), it vanished from view. Nonetheless, there is a substantial body of scientific research supporting promoting writing across the grades to foster not just in phonemic awareness but in a variety of orthographic and comprehension skills (Hefflin & Hartman, 2003).

Stotsky (1984) synthesized the research on writing-reading relationships. She found better writers read more than poorer writers, better writers tended to be better readers, and better readers produced more syntactically mature compositions than did poorer readers. Tierney and Pearson (1984) also reviewed the writing-reading research and noted that both reading and writing involve similar cognitive processes. To be successful, both activities require the use of background knowledge—both general world knowledge and knowledge of text structures and conventions. Both require memory strategies in organizing, tapping, and remembering information. And so on.

Writing activity, composing actually, according to the research of Langer and Applebee (1987) helps students clarify and consolidate what has been learned from reading, thereby enhancing understanding. In addition, composing after reading often illuminates misunderstandings or incomplete understandings that must be resolved and may work to foster reformulation or extension of what was read.

Finally, writing can make text structure more explicit to students. Recognizing how an author has structured a text is an important aspect of comprehension. To make clear the structure of a simple narrative, we might use the story mapping strategy. To assist middle school readers, we might engage them in using the various text structures found in informational texts,

including textbooks. For instance, we might explore the problem-solution structure by demonstrating just how authors develop this line of argumentation. Then students would compose their own problem-solution arguments.

Providing students with opportunities to explore various text structures enhances their reading comprehension of texts using those structures.

Extended Independent Reading

Even though the NRP noted that little experimental evidence supported independent reading, it also noted that the hundreds of correlational and cross-sectional studies indicated extensive independent reading was important to reading development. But it added a caveat. To wit:

> Although correlational findings may be useful, they also can be deceptive because correlations tell nothing about the direction or sequence of a relationship. That good readers read more could be because reading practice contributes to reading attainment, but it could also be simply that better readers choose to read more because they are good at it. If this is true, then it is reading achievement that stimulates reading practice, not the reverse. Although there is an extensive amount of correlational data linking amount of reading and reading achievement, such studies do not permit a clear delineation of what is antecedent and what is consequent. (NRP, 2000, p. 3–10)

But it is hard to imagine that reading is unlike every other human proficiency in that practice doesn't matter. I have summarized the research available on extended reading elsewhere (Allington, 2001) as have others (Krashen, 2004; Stanovich, West, Cunningham, Cipielewski, & Siddiqui, 1996). And the NRP noted that the lack of true experiments on this issue cannot be used to argue that extensive reading is *not* an important aspect of reading development.

What the NRP did say, though, was that the scientific evidence did not support the use of various incentive programs for expanding independent reading. In other words, arranging for free pizzas, stickers, or bonus points for reading volume did not seem to increase the amount of independent reading children did. The NRP warned that investments of money and time on such schemes could not be supported by any scientific evidence.

Discussion After Reading

The evidence is in that having students discuss what they read—as opposed to interrogating them about what was read—promotes growth in understanding

(Applebee, Langer, Nystrand, & Gamoran, 2003; Fall, Webb, & Chudowsky, 2000; Taylor, Pearson, Peterson, & Rodriguez, 2003). It's odd that outside of school no one really interrogates, or quizzes, people about what they've read. Imagine your surprise if a friend who saw you reading *The Lovely Bones* (Seebold, 2002) began by quizzing you. "What was the detective's name? The young girl's who was murdered? The murderer's? Her father's?" Even worse, imagine if you did not answer correctly (most cannot) and you were told to go back and read the book again. Developing children's ability to engage in literate conversation is a powerful, but again unprofitable, way to foster reading development.

Reading Aloud to Children

While reading aloud to children is not a substitute for children actually reading themselves, there is an extensive scientific research base illustrating the many positive outcomes of reading to children (Brabham & Lynch-Brown, 2002: Stahl, Richek, & Vandevier, 1991). The most common finding is one of vocabulary growth as a result of reading to children. But reading aloud also enhances reading motivation, develops genre knowledge, and even develops core curricular knowledge. All this is enhanced when teachers regularly model the sorts of thinking readers do while they read. "I'm wondering why anyone would allow ten-year-old boys to march at the front of an infantry attack," for instance, raised while reading *The Boys' War* (Murphy, 1995) aloud to a group of fourth graders.

Appropriate Texts, Readers Theatre, and Other Fluency-Enhancing Devices

Fluency is another one of those aspects of reading that has been highlighted recently, after a long period of dormancy (Allington, 1983). Suffice it to say that too many children struggle through texts word by word with little or no fluency. It is hard to imagine that such reading performances generate much motivation for further reading activity. But the first step toward fluent reading involves making sure that kids have books they can actually read accurately and with comprehension. Almost any reader can exhibit dysfluency when given material on an unfamiliar topic with many unknown words. Too many children sit all day with books far harder than they can manage, such as that fourth grader who reads comfortably at a middle second-grade level but who has a desk full of fourth-grade-level texts. Providing these children with books they can actually read improves their reading performance, not surprisingly (O'Connor, Bell, Harty, Larkin, Sackor, & Zigmond, 2002).

Only the best readers in many classrooms have a desk full of books they can read accurately, fluently, and with comprehension. A case of the rich getting

richer, by design. But just-right books won't automatically make a dysfluent reader fluent, especially after years of interruptive reading lessons in too-hard books. However, repeated rereadings and extensive independent reading seem well-documented methods for developing reading fluency (Kuhn & Stahl, 2003). Readers theatre activities (Worthy, Broaddus, & Ivey, 2001) have also been shown to foster fluency and to enhance understanding of materials being read. None of these fluency-development activities costs anything.

Choice Words

Everyone knows that expert teachers seem to have a way of knowing just what to say just when. Johnston (2004) provides a very readable review of the research documenting the impacts of some of the "choice words" the most effective teachers use to foster identity and agency as well as reading and writing development that might be measured on a standardized test. He notes that when a teacher asks, "Did anyone notice . . . ?" or says, "What are you thinking about? Stop and talk to your neighbor about it," or "Who else would like that book?" she is communicating a number of important things that impact children's notions about reading and writing and about readers and writers. Such talk also impacts their reading and writing behaviors. But such talk is necessarily highly personalized and cannot be scripted. Hard to develop ad copy for marketing teacher talk.

Motivation

How is it that after a federally funded research center spent a recent decade (1990s) studying children's motivations for reading that almost none of the talk about scientific reading instruction includes any mention of the huge amount of empirical evidence on how to foster (or undermine) children's reading motivation (Pressley et al., 2003)? The scientific evidence identifies factors such as choice of reading materials and writing topics and access to interesting texts as important to fostering engagement and continued motivation (Guthrie & Humenick, 2004). Similarly, positive classroom interactions, high-success activities, and peer interaction are also identified as critical variables of classroom literacy instruction (Guthrie & Knowledge, 2001; Taylor et al., 2003). These are no-cost, no-profit scientific findings. But any discussion of these factors has been, at best, subdued recently.

Teacher Expertise

While discussion of teacher expertise (or lack thereof) has appeared, darn little effort is being exerted to promote developing expertise in teaching

reading. Yes, there are those "y'all come" sessions where hundreds of teachers get talked to about what the research says, but the scientific research on developing teacher expertise documents that venue as patently ineffective. We have good evidence that we can create reading teacher–preparation programs that produce more expert teachers. These teachers promote greater literacy development than others prepared in less engaging and less effective teacher-preparation programs (International Reading Association, 2003). And we have evidence that extended professional development with a focus on reflecting on one's teaching also promotes expertise and concomitantly student reading growth (Birman, Desimone, Porter, & Garet, 2000; Richardson, 2003; Strickland & Kamil, 2004). But few states or school districts seem to invest heavily in improving teacher preparation or funding professional development programs that reflect what the research says. A few for-profit companies (Sopris West, Canter, Voyageur, Skylight) are marketing professional development products, but these products reflect little of the research about effective teacher learning (Birman et al., 2000).

Summary

So there you have it. Ten largely ignored research-based practices that have been documented to improve children's literacy proficiencies, even those narrow proficiencies measured on standardized achievement tests. I'll continue to argue that the inattention to these research-based practices lies more in the profit problem than in any insufficient evidence base.

Research-based ideas that can generate a profit have many proponents. First are the publishing companies who buy ad copy in professional journals, who do direct-mail advertising, who send sales representatives into schools and district offices, who purchase large blocks of space for displays at professional conferences, who have wine-and-dine budgets. Second come the entrepreneurs who stand to earn a royalty when the product is sold. Entrepreneurs who may also be federally funded researchers, professors, school district consultants, and so on. Almost all entrepreneurs regularly engage a variety of audiences and customers.

But who promotes a research-based practice that seems an unlikely profit center? Almost no one.

When entrepreneurship and profit potential are mixed with powerful political agendas, much of what we know gets ignored or contradicted. Such seems the case at the moment. Instead of developing teacher expertise in early writing as a way to enhance phonemic awareness, we get loud and frequent promotions of expensive planned curricular packages, some delivered via a computer, promoted by powerful corporations and author-entrepreneurs.

And the evidence for these packages is far less consistent than that for early writing (Patterson, Henry, O'Quin, Ceprano, & Blue, 2003; Pokorni, Worthington, & Jamison, 2004).

Instead of engaging children in independent reading activity, the press is on to place them in planned one-size-fits-all curricular packages that provide lots of consumable, low-level seatwork activities (McGill-Franzen, Love, Zmach, & Solic, in press). This, even though the NRP acknowledged that independent reading seemed to work at least as well as typical seatwork in promoting test score improvements. Instead of support for engaging, motivating classroom reading environments, we get standardized reading programs in which every child is marched, in lockstep, through the same controlled and contrived texts and activities. As Darling-Hammond (1997) notes, "Standardized practice is malpractice when viewed from a perspective of professional accountability. Professional teachers should be allowed to focus on doing the right things rather than on doing things right" (p. 66).

Instead of programs that engage children in rich and varied composing activities, we see commercial five-step formulaic writing packages and commercial reading test-prep materials. Instead of readers theatre or read-alouds we see pseudoword speeded recognition practice and expensive systems where a computer delivers packaged but barren vocabulary drill and practice. So it goes. Profitable programs continue to trump scientific evidence. And federal educational policy sustains the profits.

References

Allington, R. L. (1983). Fluency: The neglected goal. *Reading Teacher, 36*, 556–561.

Allington, R. L. (2001). *What really matters for struggling readers: Designing research-based programs*. Boston: Allyn & Bacon.

Allington, R. L. (2002). *Big brother and the national reading curriculum: How ideology trumped evidence*. Portsmouth, NH: Heinemann.

American Federation of Teachers. (1998). *Building on the best, learning from what works: Seven promising reading and English language arts programs.* Washington, DC: Author.

Applebee, A. N., Langer, J. A., Nystrand, M., & Gamoran, A. (2003). Discussion-based approaches to developing understanding: Classroom instruction and student performance in middle and high school English. *American Educational Research Journal, 40*, 685–730.

Berends, M., Bodilly, S., & Kirby, S. N. (2002). Looking back over a decade of whole-school reform: The experience of New American Schools. *Phi Delta Kappan, 84,* 168–175.

Birman, B. F., Desimone, L., Porter, A. C., & Garet, M. (2000). Designing professional development that works. *Educational Leadership, 57*(8), 28–32.

Brabham, E. G., & Lynch-Brown, C. (2002). Effects of teachers' reading-aloud styles on vocabulary acquisition and comprehension of students in the early elementary grades. *Journal of Educational Psychology, 94*, 465–473.

Cunningham, P. M. (2004). *Phonics they use: Words for reading and writing.* New York: AllynBacon.

Darling-Hammond, L. (1997). *The right to learn: A blueprint for creating schools that work.* San Francisco: Jossey-Bass.

Fall, R., Webb, N. M., & Chudowsky, N. (2000). Group discussion and large-scale language arts assessment: Effects on students' comprehension. *American Educational Research Journal, 37*, 911–941.

Guthrie, J. T. & Humenick, N. M. (2004). Motivating students to read: Evidence for classroom practices that increase motivation and achievement. In P. McCardle & V. Chhabra (Eds.), *The voice of evidence in reading research.* (pp. 329–354). Baltimore: Paul Brookes Pub.

Guthrie, J. T., & Knowledge, K. T. (2001). Promoting reading motivation. In L. Verhoeven and C. Snow (Eds.), *Literacy and motivation: Reading engagement in individuals and groups* (pp. 159–176). Mahwah, NJ: Lawrence Erlbaum.

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Hefflin, B. R. & Hartman, D. K. (2003). Using writing to improve comprehension: A review of the writing to reading research. In C. C. Block, L. Gambrell & M. Pressley (Eds.) *Improving comprehension instruction: Rethinking research, theory, and classroom practice.* (pp. 199–228). New York: Guilford.

Hoffman, J., & Pearson, P. D. (2000). Reading teacher education in the next millennium: What your grandmother's teacher didn't know that your granddaughter's should. *Reading Research Quarterly, 35*, 28–44.

International Reading Association. (2003). *Prepared to make a difference.* Newark, DE: Author.

Johnston, P. A. (2004). *Choice words: How our language affects children's learning.* Portland, ME: Stenhouse.

Krashen, S. (2004). False claims about literacy development. *Educational Leadership, 61*(6), 18–21.

Kuhn, M. R., & Stahl, S. A. (2003). Fluency: A review of developmental and remedial practices. *Journal of Educational Psychology, 95*, 3–21.

Langer, J. A., & Applebee, A. N. (1987). *How writing shapes thinking: A study of teaching and learning.* Urbana, IL: National Council of Teachers of English.

Loveless, T. (2001). *The Great Curriculum Debate.* Washington, DC: Brookings Institution.

Lyon, G. R. (1996). The state of research. In S. Carr & W. Ellis (Eds.), *Learning disabilities: Lifelong issues* (pp. 3–61). Baltimore: Paul Brookes.

McGill-Franzen, A., Allington, R. L., Yokoi, L., & Brooks, G. (1999). Putting books in the room seems necessary but not sufficient. *Journal of Educational Research, 93*, 67–74.

McGill-Franzen, A., Love, J., Zmach, C., & Solic, K. (in press). The confluence of two policy mandates: Core reading programs and 3rd grade retention. *Elementary School Journal.*

Murphy, J. (1995). *The Boys' war.* New York: Clarion.

National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction.* Available: *www.nationalreadingpanel.org*

O' Connor, R. E., Bell, K. M., Harty, K. R., Larkin, L. K., Sackor, S. M., & Zigmond, N. (2002). Teaching reading to poor readers in the intermediate grades: A comparison of text difficulty. *Journal of Educational Psychology, 94*, 474–485.

Patterson, W. A., Henry, J. J., O'Quin, K., Ceprano, M. A., & Blue, E. V. (2003). Investigating the effectiveness of an integrated learning system on early emergent readers. *Reading Research Quarterly, 38*, 172–207.

Pokorni, J. L., Worthington, C. K., & Jamison, P. J. (2004). Phonological awareness intervention: Comparison of Fast ForWord, Earobics, and LiPS. *Journal of Educational Research, 97*(3), 147–157.

Pressley, M., & Allington, R. L. (1999). What should educational research be the research of? *Issues in Education: Contributions from Educational Psychology, 5*, 1–35.

Pressley, M., Dolezal, S. E., Raphael, L. M., Mohan, L., Roehrig, A. D., & Bogner, K. (2003). *Motivating primary grade students.* New York: Guilford.

Richardson, V. (2003). The dilemmas of professional development. *Phi Delta Kappan, 84*(5), 401–406.

Scanlon, D. M., & Vellutino, F. R. (1997). A comparison of the instructional backgrounds and cognitive profiles of poor, average, and good readers who were initially identified as at risk for reading failure. *Scientific Studies of Reading, 1*, 191–216.

Stahl, S. A., Richek, M. A., & Vandevier, R. J. (1991). Learning meaning vocabulary through listening: A sixth-grade replication. In J. Zutell, and S. McCormick (Eds.), *Learner factors/Teacher factors: Issues in literacy research and instruction* (40th Yearbook, pp. 185–209). Chicago: National Reading Conference.

Stanovich, K. E., West, R. F., Cunningham, A. E., Cipielewski, J., & Siddiqui, S. (1996). The role of inadequate print exposure as a determinate of reading comprehension problems. In C. Cornoldi & J. Oakhill (Eds.),

Reading comprehension difficulties: Processes and intervention (pp. 15–32). Mahwah, NJ: Lawrence Erlbaum.

Stotsky, S. (1984). Research on reading/writing relationships. In J. Jensen (Ed.), *Composing and comprehending* (pp. 7–22). Urbana, IL: ERIC Clearinghouse on Reading and Communication Skills and the National Conference of Research on English.

Strickland, D. S., & Kamil, M. L. (Eds.). (2004). *Improving reading achievement through professional development.* Norwood, MA: Christopher-Gordon.

Taylor, B. M., Pearson, P. D., Peterson, D. S., & Rodriguez, M. C. (2003). Reading growth in high-poverty classrooms: The influences of teacher practices that encourage cognitive engagement in literacy learning. *Elementary School Journal, 104*, 4–28.

Tierney, R., & Pearson, P. D. (1984). Toward a composing model of reading. In J. Jensen (Ed.), *Composing and comprehending* (pp. 33–45). Urbana, IL: ERIC Clearinghouse on Reading and Communication Skills and the National Conference of Research on English.

Tierney, R. J., & Shanahan, T. (1991). Research on reading-writing relationships: Interactions, transactions and outcomes. In R. Barr, M. Kamil, P. Mosenthal, & P. D. Pearson (Eds.), *Handbook of reading research* (Vol. 2) (pp. 246–280). New York: Longman.

Timar, T. (1994). Federal education policy and practice: Building organizational capacity through Chapter 1. *Educational Evaluation and Policy Analysis*, *16*, 51–66.

Torgeson, J. K. (2000). Individual differences in response to early interventions in reading: The lingering problem of treatment resisters. *Learning Disabilities Research and Practice, 15*, 55–64.

Venezky, R. L. (1998). An alternate perspective on Success for All. In K. K. Wong (Ed.), *Advances in educational policy* (Vol. 4) (pp. 145–165). Greenwich, CT: JAI.

Worthy, J., Broaddus, K., & Ivey, G. (2001). *Pathways to independence: Reading, writing, and learning in grades 3–8.* New York: Guilford.