Elements of Successful Reading Instruction

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Positive results for students will come from changes in the knowledge, skill, and behavior of their teachers and parents. State policies and programs must provide the opportunity, support, incentive, and expectation for adults close to the lives of children to make wise decisions.

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Summary

Research-based methods for reading instruction are summarized for students in elementary, middle, and high school.

Abstract

Based on a series of research syntheses, this paper offers recommendations for reading instruction in elementary through high school. The recommendations represent a comprehensive approach to teaching reading, rather than focusing only on some students. At elementary levels, emphasis is on learning the alphabetic principles on which literacy is based. As students progress, the emphasis shifts to vocabulary and comprehension. In addition to those practices that are supported by research, some practices that should be avoided are discussed because they are NOT supported by research findings. Besides the commonly discussed instructional practices, other, less commonly discussed practices are recommended. Where recommendations are available, they are offered for English language learners, despite the small body of research available for this population.

Introduction

The results of the most recent national administration of the National Assessment of Educational Progress in Reading showed the most dramatic gains since the inception of the program. These gains were at the fourth grade, where many, if not most, of the students would have benefited from a number of years under the federal policy mandates of Reading Excellence and No Child Left Behind. These initiatives have focused instruction on a small set of important variables, required monitoring of student progress, used data for instructional decision-making, and provided for professional development of teachers. The gains were especially pronounced for Black and Hispanic sub-groups in the NAEP sample. Should similar gains be realized over the next five years, the achievement gap would disappear. As it stands, the gaps for those sub-groups are at historic lows. In what follows, we examine some of the underpinnings for those policies and review the content.

Current national policy, as reflected in No Child Left Behind, Reading First, and Early Reading First, emphasizes instruction in the “Big Five” skill areas: Phonemic Awareness, Phonics, Fluency, Vocabulary, and Comprehension. The following sections review the research-based findings in each of those skill areas. Following those sections, the research on some additional important factors in reading and reading instruction is elaborated.

In what follows, several major research syntheses are combined to offer suggestions for teaching reading across the grades. The sources that were used were all based on systematic analysis of the research literature. These syntheses were supplemented by analyses that were conducted subsequently using the same criteria as the original work.

Key Principles

Phonemic Awareness Is Essential For Beginning Readers

*Phonemic awareness (PA)* is the ability to manipulate sounds in oral language. While many students arrive at school being able to do phonemic awareness tasks, a large number of students still need to learn or refine this skill in school. The research has shown that acquiring phonemic awareness early is predictive of reading ability through elementary school (Juel, 1988).

PA instruction includes tasks like:

1. Phoneme isolation, which requires recognizing individual sounds in words—for example, “Tell me the first sound in paste.” (/p/)

2. Phoneme identity, which requires recognizing the common sound in different words—for example, “Tell me the sound that is the same in bike, boy, and bell.” (/b/)

3. Phoneme categorization, which requires recognizing the word with the odd sound in a sequence of three or four words—for example, “Which word does not belong? bus, bun, rag.” (rag)

4. Phoneme blending, which requires listening to a sequence of separately spoken sounds and combining them to form a recognizable word—for example, “What word is /s/ /k/ /u/ /e/?” (school)

5. Phoneme segmentation, which requires breaking a word into its sounds by tapping out or counting the sounds or by pronouncing and positioning a marker for each sound—for example, “How many phonemes are there in ship?” (three: /s/ /i/ /p/)

6. Phoneme deletion, which requires recognizing what word remains when a specified phoneme is removed—for example, “What is smile without the /s/?” (mile)

Phonemic awareness is an oral language skill, and requires the manipulation of speech sounds. However, the review of the National Reading Panel found that PA training is more effective when letters are used to assist students in manipulating phonemes. Because knowledge of letters is important for other aspects of reading, it is more efficient to teach both PA and letters at the same time.

Other important findings related to PA instruction from the NRP review are about the conditions under which instruction is delivered. For most instruction, it is usually thought that individual instruction is more effective than that delivered in larger groups. The NRP review found
that PA instruction was most effective when delivered in small groups, when compared to individual instruction or to large group instruction. This is probably the result of the additional vicarious learning that takes place while listening to other students’ responses. Whatever the reason, the recommendation is clear: PA instruction is most effective when conducted with small groups of students.

A common misunderstanding about PA instruction is that it needs to be an emphasis for a substantial amount of time. The NRP review suggests that the optimal amount of instruction is about a total of 20–25 hours. Beyond that the effects seem to diminish, suggesting that students could be helped by other types of instruction instead of continuing to do PA instruction beyond the 25 hour limit.

It also appears that PA instruction is most effective for students in kindergarten and first grade, regardless of the total amount of instructional time devoted to it. It does appear that older students do not benefit from continued PA instruction.

Finally, it also seems to be the case that English language learners (ELLs) who acquire PA in their native language are able to quickly transfer PA to English. It is usually unnecessary to do intensive PA instruction for ELLs who have acquired literacy in their native language. They will benefit more by moving directly into other reading-related skill instruction.

**Phonics Instruction Is Essential For Students in Early Elementary Grades**

Systematic phonics is teaching that stresses learning of letter-sound correspondences and their use to read and spell words. Phonics is important because it allows readers to translate written text into oral speech and use their oral language comprehension skills. Phonics instruction is most effective for students in kindergarten and first grade. As with phonemic awareness instruction, phonics instruction becomes less effective as students progress through the grades. At middle and high school grades, only about 10% of all students who are struggling with reading can be remediated by phonics instruction.

In general, there are two types of phonics instruction, analytic and synthetic. Analytic phonics proceeds by having students analyze words they know and arriving at the rules that associate letters and sounds. Synthetic phonics is based on teaching the rules to students. Systematic synthetic phonics attempts to teach the rules in a rational sequence. The NRP review found that systematic synthetic phonics instruction was more effective than other approaches.

**Fluency Should Be A Focus of Early Reading Instruction**

Fluency is the ability to read with speed, accuracy, and proper expression. Fluency is often neglected as a focus for instruction. However, fluency is one of the hallmarks of good comprehenders. It is difficult or impossible to find good comprehenders who are not fluent readers. Fluency is obviously a proxy for the underlying skills. Speed and accuracy relate to the ability to identify words while the proper expression is indicative of whether or not the reader comprehended the text.

Two methods were found to be effective in the NRP review: repeated oral reading and guided repeated oral reading. Repeated oral reading is a technique in which students read and re-read a passage. The intent is to get students to be able to automate their word recognition processes. The format ensures that students will practice on words that they know, adding more words that are unfamiliar. Using the same passage guarantees that the words will be the same from one reading to the next, rather than an entirely new set of words in a completely different passage.

Guided oral reading involves instructional feedback to students as they read. Guided reading is usually done in small groups, where the teacher can monitor the successes and difficulties students have in reading. Both of these methods of fluency instruction improved general reading ability.

However, there is some evidence that overemphasizing fluency can lead to higher accuracy without increasing speed. That is, students may focus on accuracy and spend an inordinate amount of time on decoding to the detriment of speed. Unless both speed and accuracy increase, comprehension may not improve.

**Vocabulary Is The Most Important Predictor of Comprehension**

Vocabulary is the knowledge of word meanings. This definition includes a number of different “types” of vocabulary. An individual’s vocabulary may consist of words that can be recognized in text or it may be the words that an individual can use in writing or conversation. For beginning readers, oral language vocabulary is important because it is the link from text to meaning. That is, when a beginning reader decodes a word to speech, it is only meaningful if it is in the reader’s oral language. For example, a reader might decode the word “ferple”, but it fails to be meaningful. Conversely, when a reader decodes the word “jump”, the oral language representation can be used to access meaning.

One of the most important findings of the NRP analysis was that direct, explicit instruction of vocabulary improves comprehension. This is dramatic because for many years it was believed that there were too many words to be learned to teach them explicitly. It is important to teach some words explicitly because they occur so infrequently in text that they may never be acquired incidentally. The general conclusion is that both explicit instruction and indirect or incidental acquisition are both important in acquisition of vocabulary.
Perhaps the most important variable in vocabulary acquisition seems to be the number of exposures to an individual word. Estimates are that 8 to 10 exposures are needed to acquire a word, although the actual number depends on the prior knowledge, meaningful context, and time between exposures.

Pre-teaching vocabulary prior to reading is an effective strategy for vocabulary acquisition. Because repetition is an important variable in learning new words, make certain that readers have some idea of the meaning of unfamiliar words before they read a text. If this instruction occurs before reading, students will be able to recognize and incorporate previously unfamiliar words in their vocabulary.

Another surprising NRP finding was that students often knew the vocabulary but were confused or unfamiliar with the tasks involved in vocabulary assessment. A student might be unable to “give a definition” of a word, but might be perfectly capable of giving an example or describing something about the word. If teachers restructure the tasks, vocabulary instruction can be more effective. It is also the case that vocabulary instruction is more effective when students are actively engaged in the learning tasks.

Finally, vocabulary instruction can be successfully delivered by computer. This is probably due to the leveraging of instructional time rather than any special characteristic of the computer instruction. That is, students can use the computer at times when they would not be receiving computer instruction and thus have opportunities to practice that would not be otherwise available.

Once the conclusion that explicit vocabulary instruction is effective is accepted, the question about what words should be selected for instruction becomes crucial. Selecting words should be based on three criteria:

**Importance and Utility**
How useful is the word for the student in future reading? Will it occur often enough to justify having spent instructional time teaching the word?

**Instructional Potential**
Does the word to be taught have any implications for other vocabulary or for some other curricular purpose?

**Conceptual Understanding**
How important is the word for understanding the text at hand?

These are not simple questions that have unambiguous answers, so there are few absolute rules. One system for making these decisions has been proposed by Isabel Beck and her colleagues. They divide words into three groups, called Tiers. Tier 1 words are very common words the students know and do not need instruction. Tier 3 words are relatively uncommon, infrequent words. Tier 2 words are those words that are between the other two tiers. These Tier 2 words should be the focus of instruction, before reading a text or passage. Because students do not know Tier 3 words, they should be taught during the reading, rather than before. In this scheme, instructional time is devoted to the words that students will encounter more frequently and, therefore, have more opportunity to use.

For ELLs, particularly those whose native language is Spanish, some research suggests that instruction in cognates is effective in increasing vocabulary. Estimates are that 30-50% of academic language in Spanish and English consist of cognates. Research shows that students may not make use of that fact because they do not automatically “search” for cognates. Appropriate instruction allows students to make use of this knowledge and, thus, reduce the learning burden for vocabulary in English.

### Comprehension Strategies Should Be Taught Explicitly

Strategies are specific procedures that guide individuals as they make meaning from text. The NRP analysis found a number of effective comprehension strategies that were proven in research studies. The following are brief descriptions of those strategies.

**Question answering** is the traditional form of comprehension. As they read, readers are aware of a set of questions that need to be answered. Such questions can be provided by a teacher or as a culminating activity given at the end of a reading selection in a textbook. However, they are eternally generated. Being aware of what information is thought to be important is a strategy that improves comprehension.

**Question generation** is different from question answering in that the emphasis is on students producing the questions they need (or want) to answer from reading a passage. To teach this strategy, “good” question generation needs to be modeled for students and students need to be actively involved in the process of activating prior knowledge, comparing it to what might be expected from the passage, and generating questions to fill the gaps. Question generation is an extremely potent technique, showing larger effects than other comprehension strategy instruction techniques.

Constructing maps of story structure is a proven way to improve the comprehension of narrative or story text. This strategy involves generating graphic representations of the elements of stories (e.g., setting, initiating response, internal response, attempt, consequence, reaction). By doing this, students raise their comprehension. The effect seems to be a result of both structuring the analysis of the stories as well as engagement in physically constructing a representation.

Comprehension monitoring is a metacognitive strategy that involves the continual evaluation of a reader’s understanding of the text. Part of the strategy also is knowing what to do when comprehension “goes awry.” In short, this strategy seems to be effective because students be-
come aware of whether or not they are understanding and know how to fix the problem when comprehension suffers.

Cooperative learning involves working with others on comprehending text. When a group of readers works together to understand or learn from a text, comprehension improves. It is obvious that not everyone has the same background knowledge, abilities, or difficulties in reading. Being able to leverage the skills and abilities of others is clearly a benefit. One important caution is that this is not as simple as giving a group reading assignment. There needs to be careful planning so that the task is sufficiently complex to require group effort. What is surprising about the results on cooperative learning is that both high and low achieving students benefit from participating in collaborative learning groups.

Summarizing is yet another research-proven comprehension strategy. In learning how to summarize, students must learn to distinguish details from main ideas, unique information from redundant information, and the overall meaning of the text. Research typically shows that summarizing instruction, along with question generation, is one of the most powerful techniques for improving comprehension.

Using graphic organizers to represent text is another powerful comprehension strategy. This technique is related to the story map technique described above, but is used for information text rather than stories. Elements of summarizing can be found in the procedures for producing graphic organizers, because readers have to extract the overall meaning of a passage prior to producing an appropriate graphic representation.

It is tempting to look at each of these research-proven strategies individually, but the NRP analysis found that approaches that combined multiple strategies were more effective than those that used only a single strategy. One of these approaches that has been widely researched is Reciprocal Teaching, a method that combines intensive reading, modeling, and strategy instruction, including question generation and summarizing. While it is difficult to pull apart the components of such an approach, some analyses have suggested that question generation is the most powerful component of reciprocal teaching with summarizing also having substantial effects.

### Other Factors Are Also Important

In the preceding sections, the emphasis has been of the findings of the National Reading Panel. The NRP analysis clearly suggests that, while the “big five” skill areas are important, there are other factors that are also critical for reading. Some of these are mentioned in the NRP; some are not. The follow sections discuss a number of these areas.

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### Motivation and Engagement Are Essential For Student Learning

Several related concepts often are used when describing conditions under which students desire to read. One of those is motivation which can be defined as the cluster of personal goals, values, and beliefs that an individual possesses related to the topics, processes, and outcomes of reading. Yet other terms that are used include interest, attitude, or beliefs. These are different from motivation in that a reader could have an interest in reading but choose not to do it. Research shows that many students in fact are perfectly capable of reading, but simply choose not to. A newer term, engagement, is yet another variable in this cluster of concepts related to the affective dimensions of reading. Engagement in reading is the extent to which an individual reads to the exclusion of participating in other activities, particularly when faced with choices.

Research work has shown that when the conditions of instruction are appropriately arranged, students become engaged in reading. They then improve in their reading abilities, self-concept, and intrinsic motivation to read. When students are intrinsically motivated, they will persist at reading without needing external rewards or approval.

Some of the factors that have been shown to be related to motivation and engagement are co-construction of learning goals by teachers and students, providing choices for students (even when they are within a limited range), appropriate reading strategy instruction, collaborative learning environments, and clear and relevant assessments. Under these conditions, students will increase their motivation and engagement and consequently raise their reading achievement.

### Principled Professional Development Will Yield High Quality Instruction

Perhaps no area has had so much attention in recent years as that of professional development and teacher education for literacy. The NRP analysis was one of the first to show that experimental work did exist and when all of the appropriate research conditions were met, professional development was successful in raising student achievement.

What was clear from the NRP analysis and some subsequent reviews of the research is that professional development can be effective under the appropriate conditions. Professional development should be consistent, extended, site-based, and research-based. One of the difficulties with many professional development efforts has been the limited nature of the efforts. The so-called “one-shot” professional development efforts have been repeatedly shown to be ineffective. It is often based on personality rather than competence. Effective professional development is resource intensive and must be taken more seriously. One
thing that the NRP analysis revealed is that there was typically no attempt to ensure that the professional development had ultimate effects on student outcomes.

Recently, literacy coaching has become a popular solution to professional development. Literacy coaches are specialists whose jobs are to assist classroom teachers with literacy instruction. Despite the popularity of literacy coaches, there is no experimental research to support the claims of efficiency. Rather than conclude that this is a reason NOT to use literacy coaches, this should be an indication that what is needed is careful monitoring and evaluation of the implementation of such programs.

**Access to Books Is Crucial For Students**

Regardless of the amount or the quality of instruction it is still important to guarantee that students have access to books, of a variety of genres on a variety of topics. This is an important variable both in school and out of school. Many at-risk students do not have access to books at home or in their communities. Many classroom libraries have few information books available for students to read. For both these reasons, it is important to ensure that books are available to students for recreational reading and for extended reading and learning on content topics.

One note here is that we should broaden our view of what constitutes access to “books”. A great deal of what students read is not in conventional books, but rather electronic text that they find online. Since the text on the internet is often relatively difficult, it is probably the case that exposure to this text might serve the same function that exposure to conventional printed materials does. Some evidence suggests that students will read much more difficult text online than they will in conventional print materials.

**Technology Can Leverage Instructional Time**

One of the perennial hopes for improved reading instruction has been the application of technology, particularly computer technology. The National Reading Panel analyzed research on computer technology for reading instruction and found a small number of studies that supported the use of computer technology for reading instruction in all areas. Since the NRP analysis, many more commercial products have appeared, many of which are far more sophisticated than those programs studied in the NRP set. The National Evaluation of Educational Technology is collecting experimental data on the effectiveness of some of these newer programs.

The important lesson about technology is that it can be used to leverage instructional time. By making more practice (with feedback) available to students, their learning increases. In addition, for many students there is a motivational factor involved in using the computer for learning.

**Assessment Must Be a Cornerstone of Any Instructional Program**

Data-driven decision making is one of the foundations of NCLB. While there is little research on this topic, per se, what there is suggests that this is an effective strategy for raising achievement. At some level, this is simply an issue of focusing instruction so that it relates more directly and immediately to the needs of students. At another level, it is clear that there is a need to use assessments that relate directly to the content of instruction. It is difficult to teach without knowing either what students need or whether the instruction they receive is effective.

One important distinction here is the use of standardized or informal assessments. In a general sense, both are necessary for different purposes. Standardized assessments can serve as indicators of progress for students compared to other students. This is at least one indicator of the efficacy of a program. However, instructional decisions need to be made locally, without reference to other students. It is important for instruction to determine whether or not the particular content being taught is learned as well as what is needed next.

**Wide Reading and Reading Practice Are Not Stand-alone Solutions**

Up to this point, most of the suggestions are about practices that research has indicated are successful at improving reading ability. There are some practices that do not improve students’ ability to read. One of the common suggestions for helping students become better readers is to get them to read more. It is well-established that good readers read more than poor readers. What is not established is that getting students to read more will make them better readers. Yet, perhaps the most popular “intervention” in schools is to set aside a portion of the reading period to allow students to read something of their own choice.

There are many variations of these programs—USSR (uninterrupted sustained silent reading), DEAR (drop everything and read), and Million minutes. The National Reading Panel found that there were no studies that showed that any of these programs were effective in raising reading achievement.

Recent research has begun to show that simply setting aside time for reading is insufficient for raising reading achievement. However, when free reading is coupled with instruction, reading achievement will likely be raised.

This issue is related to those raised above in “Access to Books.” The difference is that access to books can be provided in a more planful way than that suggested by some of the free reading programs. Practicing reading is very important. It cannot be left completely to the vagaries of choices by individual students. Teachers need to be able to provide support and instruction that will enable students
to select from available texts in ways that will improve their ability to read.

Different Instructional Practices Must Be Used For Older Readers

Reading instruction needs to be provided after third grade for several overriding reasons. First, students need to have continued support to reinforce what they have learned in the early grades. Second, the kinds of materials that students need to read as the reach upper elementary differ from those that students read in primary grades. In the primary grades, reading instruction has been almost exclusively about reading stories or narrative texts. As students progress through school, the types of text they have to read become almost exclusively informational. Third, reading is developmental across the entire lifespan of readers. Instruction is helpful as new reading skills and habits develop.

For readers at fourth grade and above, reading instruction needs to focus on vocabulary and comprehension. Because most reading in the upper grades is about content domains like history, social studies, and science, comprehension and vocabulary instruction, it is important to assist students in understanding the unique structures of text in those domains. Reading science texts, for example, requires attention to detail. Reading history may require more attention to the broader issues, rather than minute details.

The following list provides a guide for attending to important aspects of reading programs for middle and high schools. Exemplary programs attend to all, or most, of these, but emphases among good programs may vary.

Effective Adolescent Literacy Programs Can Be Created

These fifteen suggestions are taken from READING NEXT, a document that assembled the research base for effective literacy programs at middle and high school. They are presented here in short format; there is an extensive body of research supporting each element. Some of these elements are aimed at instruction; others are aimed at infrastructure. Together they represent the ideal best possible program for adolescent literacy. More realistically, many of these elements receive varying degrees of emphasis among even very successful programs. READING NEXT offers brief summaries of the research on each of the following points. A more thorough treatment of the research on adolescent literacy can be found in Kamil (2003).

Direct, explicit comprehension instruction: Instruction that makes reading comprehension strategies explicit to students through modeling and explanation and gives students ample opportunities for practice is a requirement for effective teaching of reading beyond the primary grade levels. The emphasis on direct, explicit instruction mirrors that for younger grades, even though the emphasis is on comprehension, rather than word-level skills.

Effective instructional principles embedded in content: Instruction should be embedded and reinforced across content areas, with attention paid to content-specific texts and tasks. Regardless of the importance of literacy skills, instruction needs to attend to content. When sound instruction is brought to bear on both reading and content, student achievement will improve.

Motivation and self-directed learning: While motivation was noted above as an important element for reading, it is even more important for older readers who seem to be less motivated than younger students. Instruction must promote engagement and self-regulated learning for the development of motivated and flexible literacy skills.

Text-based collaborative learning: Instruction for middle and high school students needs to provide opportunities for students to engage in guided interactions with texts in groups in order to foster learning of new knowledge. The key here is that this is text-based learning. Research suggests that collaborative learning activities benefit both high and low ability students.

Strategic tutoring: Despite the fact that tutoring is time and resource intensive, it is necessary to provide individualized instruction for struggling readers. Such instruction should focus on making students into independent readers. Thus, there is a need for careful monitoring of student performance so that when specific skills need to be taught intensively there is data to support that need.

Diverse texts: Middle and high school students must have access to and experience with texts at a variety of difficulty levels that vary in the styles, genres, topics, and content areas they cover. At this level, learning focuses on information texts, but students also need access to literary text. Most important is that instruction needs to prepare students to be able to read fluently across the variety of texts.

Ongoing formative assessment of students: Literacy instruction at middle and high school should be determined by the use of ongoing assessment of students that helps teachers target instruction. There is a wide variation in the needs of students at these levels, and assessment is critical to understanding the needs of individual students.

Extended time for literacy: Perhaps the major difference between elementary school and middle and high schools is that reading clearly is emphasized as an instructional target in the elementary school. However, as the NAEP data show, the needs are increasingly critical in upper grades. Reading and writing instruction should take place
for longer than a single language arts period and should also be extended through integration and emphasis across content areas.

*Professional development:* Professional development is an important target for middle and high school teachers because many have not had experience or coursework in teaching reading. Teachers should participate in professional development experiences that are systematic, frequent, long-term and ongoing to improve ability to teach reading and writing instruction across the curriculum. These experiences should also relate directly to the content areas in which they teach.

*Ongoing summative assessment of students and programs:* Student progress should be monitored and tracked over the long-term. This is different from the formative assessment that should occur on a continual basis at the classroom level. Summative assessment is needed to ensure that whatever curricular emphasis is placed on reading instruction is effective.

*Teacher teams:* Because so few middle and high school teachers have experience in teaching reading, there is a need to find ways to leverage whatever expertise resides with the faculty. One way to accomplish this is to make certain that the infrastructure supports teachers working in small, interdisciplinary teams to allow for collaboration and more consistent and coordinated instruction and professional development. This will ensure that there is maximum benefit to the student from faculty expertise. This plan will also help to ensure that literacy instruction is consistent across the curriculum.

*Leadership:* Principals and administrators should participate in professional development and foster teachers taking leadership roles. If this is done, there is the likelihood that rather than adopting specific techniques, capacity will be developed at the school level to sustain programs over the long term. Leadership is important, and it is even more important that all administrators know what their faculties are doing and why. This professional development should include both the instructional professional development that teachers pursue and the professional development necessary to be more capable administrators.

*A comprehensive and coordinated literacy program:* At the elementary school, there is typically a curricular solution to the literacy program. At middle and high schools, there are few such solutions. Instruction should encompass all aspects of literacy in ways that allow all facets of the program to complement each other. Instruction should be consistent with professional development as well as the chosen materials and approaches for learning. While there are currently few mechanisms for doing this, it is clearly an emerging priority.

As noted above, this is a rather long list of elements that can be found in literacy programs for middle and high schools. That is not to say they are irrelevant or unimportant even at the elementary level. Rather, they should be considered as a guide to exemplary programs and as a set of indicators about where to look to improve literacy.

### Conclusion

Reading is a critical set of skills that needs to be acquired. The recommendations presented in this document represent some of the most important that research has shown to be effective. Many of these recommendations are explicitly mandated by federal and state policies. Some of these recommendations are meant to augment the mandates. Successful new implementations, or improvements in current implementations, will help ensure adequate progress and provide a foundation for the continued success for students in primary grades. It will also ensure that older students benefit from continued support in literacy.

While there are many questions about best practices in literacy instruction that still remain, the suggestions in this paper provide enough ammunition to go forward to improve the reading ability of students. New research will provide new information about other aspects of reading instruction, so continual professional development is essential to maintaining high quality instruction for students.

### References

Some Additional Sources of Information


