

Principal's Guide to the Elements of an Effective Reading Program in Middle and High School

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Introduction

If your goal is to improve reading outcomes for students in your school, this guide can start you thinking about the most critical changes that must be made. It does not contain all the information needed, but it will refer you to additional readings in specific areas to enrich your knowledge. Think of this document as a “quick start” guide for a school-level reading initiative. It can point you in the right direction, but it can only provide a taste of the knowledge needed to be a successful literacy leader in your school. We encourage you to become familiar with the ideas in the guide, and then embark on a program of systematic study to fully prepare for this challenging and rewarding task. The information in this guide is based on scientific research on reading and reading instruction, as well as studies of successful schools and interviews with successful principals.

The guide is written for principals of both middle and high schools. We acknowledge that there are often considerable differences in structure and organization of these two educational settings, but research suggests that the essential requirements for providing high quality support of literacy growth in middle and high schools is very similar. Student characteristics in middle and high school can also differ substantially, but again, the essential instructional challenges for supporting literacy growth in these two populations of students are highly similar. We have identified the essential elements of effective reading programs in both middle and high schools with the expectation that these guidelines will always need to be adapted to individual school and student circumstances.

Although the general topic of this guide is literacy improvement, the specific focus is on reading. The word *literacy* encompasses more than just reading skill, and it also refers to reading in many different forms. In this document, we focus on the classroom and school-level elements needed to improve *academic literacy*, which is defined as the kind of reading skill students need to be successful in most content area classrooms. This is also the type of reading skill that is assessed on state-level reading accountability examinations. Although writing is also an important aspect of literacy, this document focuses primarily on reading skills.

Reading proficiency at the middle and high school level is usually defined as the ability to understand and learn from grade-level text. Of course, this is a very complex skill itself, but its most essential elements involve:

- the ability to read text accurately and fluently;
- enough background knowledge and vocabulary to make sense of the content;
- knowledge and skill in using reading strategies that improve understanding or repair it when it breaks down;
- the ability to think and reason about the information and concepts in the text; and
- motivation to understand and learn from text.

In other words, reading proficiency in adolescents requires that students be able to identify the words on the page *accurately and fluently*, that they have enough *knowledge and thinking ability* to understand the words, sentences and paragraphs, and that they be *motivated and engaged* enough to use their knowledge and thinking ability to understand and learn from the text. We

want to emphasize that motivation to understand and learn from text is a critical component of reading comprehension for middle and high school students. It takes real effort to understand the many textbooks and other forms of complex written materials students encounter in their study of literature, history, social studies, science, or mathematics. Unless students are appropriately engaged, they often do not fully apply the skills they have, nor will they be motivated to acquire additional skills and knowledge.

Thinking about literacy goals:

Any initiative for improvement needs to be guided by clear goals. Given all that we currently know about the way reading skills develop during adolescence, as well as what we know about the demands for literacy once students leave school, literacy initiatives in middle and high school should be focused on three goals.

- The first goal should be to *improve overall levels of reading proficiency*. To succeed in the world after school, we know that adolescents, in general, must leave high school with even higher levels of reading proficiency than they are currently attaining.
- The second goal should be to insure that *all students make at least expected yearly growth in reading ability* each year they are in school. Students who enter middle school reading at grade level need to learn many new skills and acquire extensive knowledge to be able to meet grade level standards at the end of high school.
- The third critical goal for any literacy initiative in middle and high school should be to provide instruction that is sufficiently powerful to *accelerate the development of struggling readers*. Instruction for these students must produce substantially more than one year's growth in reading ability for each year of instruction. Unless struggling readers are provided with instruction this powerful for as long as they need it, they will remain impaired in their ability to learn from grade level text.

The elements of instruction required to meet these goals

There is almost universal agreement that both *content area teachers* and *reading specialists* must be involved for schools to be successful in meeting the goals outlined above. Content area teachers must help students grow in the knowledge, reading strategies, and thinking skills required to understand and learn from increasingly complex text. Reading specialists are necessary to provide intensive instruction that can skillfully address the wide range of needs of struggling readers. As one successful middle school principal described it,

Teachers use reading strategies in all their classes. ...Science teachers have a tremendous science vocabulary program. Vocabulary development is embedded in the content across the curriculum in all classes. Social studies teachers directly teach reading strategies as part of social studies. They use maps, charts, and reading for information.

A successful high school principal made this comment,

Reading instruction in the content area is expected of all of our teachers, whether it be culinary or industrial electricity. The reading coach has

conducted professional development with all of our teachers on different reading strategies and on the importance of reading.

Content area teachers use many strategies to support the growth of academic literacy in their students, but current research suggests that student's growth in literacy could be further enhanced by providing more effective instruction in the following six ways. This is not an exhaustive list of effective literacy related practices for content area teachers, but it identifies the research-based instructional strategies that are most frequently discussed in terms of improving reading skills in all students. They are:

1. **Comprehension strategies.** Instructing and supporting practice that improves use of effective reading strategies before, during, and after reading. Comprehension strategies are behaviors that can be consciously applied to improve understanding and learning from text.
2. **Discussion.** Creating opportunities for deeper, and more sustained discussion of content from text. These extended discussions of text can either be facilitated by the teacher, or they can occur as structured discussions among students participating in cooperative learning groups.
3. **High standards.** Setting and maintaining high standards for the level of text, conversation, questions, and vocabulary reflected in discussions and in reading and writing assignments.
4. **Reading-writing connection.** Strengthening the reading-writing connection to improve student opportunities to reflect on the meaning of text and receive feedback on their reflections.
5. **Motivation and engagement.** Creating more engaging and motivating classrooms, and interacting with students in a way that promotes internal motivation for reading. Students will learn to process text more deeply if reading is relevant to the student's lives and they are pursuing meaningful learning goals in an atmosphere that supports student initiative and personal choices.
6. **Content learning.** Teaching content knowledge in ways that insure learning of the most essential concepts by all students, even those who struggle in reading the textbook. Teachers should employ instructional routines, such as use of graphic organizers or concept comparison routines, that deepen understanding and also show students better ways of learning new content on their own.

While it is clear that content area teachers cannot be expected to teach basic reading skills to struggling readers, they can *teach strategies, use appropriate instructional routines, lead and facilitate discussions, raise standards, and create engaging learning environments* that help students improve their ability to comprehend text. In the words of another successful principal:

We stress with our content teachers, we are not expecting them to teach kids to read, but they must be able to recognize when kids can't read captions, figures, or make connections within sentences. We provide reading strategies to them in morning and planning period staff trainings.

Instruction for struggling readers

In addition to providing active and skillful literacy instruction by content area teachers within their own disciplines, both middle and high schools must also develop the capacity to provide more intensive and targeted reading instruction for students reading below grade level. The two most important ideas to keep in mind when thinking about adolescent struggling readers are:

- whatever instruction they have had in the past, it has not been strong enough to help them meet grade-level expectations in reading; and,
- they have probably not been doing very much reading for some time, and are likely to be very discouraged about being able to read well.

These ideas suggest that, not only must the reading instruction they receive in your school be significantly more powerful than the instruction they have received in the past, but it also must be more engaging and supportive, if it is to be successful.

Although adolescent struggling readers are a very diverse group in terms of their instructional needs, it may be useful initially to think of these students as falling into two groups. One group (reading perhaps one to two years below grade level) of students have primary needs in the area of reading comprehension. They need powerful, supportive instruction in vocabulary and strategic reading skills, with supported reading experience to increase their fluency and engagement in thinking about meaning while they read. A few of these students may need help developing better strategies to identify some of the more complex, multi-syllabic words they will encounter in text, but, for the most part, they need instruction focused on improving their ability to comprehend and learn from text. The second group of struggling readers, usually smaller than the first, contains students with severe and pervasive reading difficulties. The challenges of these students extend into basic problems with reading accuracy (usually caused by weak phonics/word analysis skills), but also include all of the other more complex reading skills involving lack of content knowledge, thinking/reasoning skills, reading strategies, and vocabulary. These are the students who cannot easily recognize many of the words in grade level text, and also are not able to effectively use word analysis strategies to identify words that are not familiar to them. Their instructional needs are both broader and deeper than students in the first group.

Students in the first group will usually require an extended period of intensive instruction in vocabulary and reading comprehension strategies coupled with supported practice in reading, writing about, and discussing the meaning of text, in order to help them meet grade level standards in reading. These students can also profit from supportive instruction from their content area teachers. Students in the second group will require a longer period of more intensive instruction (i.e. more instructional time, smaller instructional groups) containing guidance in the use of basic word analysis/word identification strategies coupled with even stronger instruction to support reading comprehension than is required by students in the first group. A middle school principal who has seen substantial improvement in student reading scores within the last several years commented on the importance of effective interventions in this way:

The contribution of our intensive reading teachers is the most essential thing that contributes to our reading outcomes. This is our second year of our double block schedule (90 minutes). We have six intensive reading teachers for our [lowest performing] students.

Of course, what we have just described is undoubtedly an oversimplification of the actual extent of diversity among struggling readers in most middle and high schools. There may also be some students, for example, with specific language disorders that may need to be addressed in order to improve reading, or with unusual combinations of skills and knowledge that will require individually adapted programs. However, as a beginning way of addressing the problems of struggling readers in most secondary schools, principals should be aware that they will need to eventually develop a tiered system of support that involves at least the two tiers described above. One of the keys to successful work with struggling readers is to frequently and carefully monitor their progress within their initial placement so that instruction can be adjusted to meet their needs if it is not successful.

Critical elements of a school-level literacy action plan

This next section is the core of this guide. It outlines the elements of school-level planning and leadership seen in most middle and high schools that are successfully addressing the challenge of improving reading outcomes for their students. It provides guidance in three areas:

- Critical leadership activities
- Using data to guide instruction
- Appropriate and effective instructional materials

Critical leadership activities

In one of the documents recommended for further reading at the end of this guide, Dr. Melvina Phillips, a former principal herself, says, “Strong leadership from both administrators and teachers is an essential building block in constructing a successful literacy program, but the role played by the principal is key to determining success or failure of the program.” (*Creating a Culture of Literacy*, p. 7). Leadership, of course, must start with personal commitment; a deeply felt urgency about the need for improvement. This commitment, when accompanied by leadership skills and knowledge, can lead to real increases in a school’s capacity to provide effective literacy instruction for all students. An outline of activities that are commonly observed in schools that have launched and sustained effective literacy efforts is provided below..

1. *Establishment of a school Literacy Leadership Team.* Since the success of any school wide initiative depends on having the support of the teachers from the beginning, this team is composed of carefully selected content area teachers, reading specialists, administrators, and usually the school media specialist. This team works with the principal to identify current strengths and weaknesses in the school’s literacy efforts, priorities for improvement, the resources that can be applied, and the strategies to support change. They study together, plan together, and lead together. This is the group that gives

vital assistance to the principal in initiating and supporting all the improvements that eventually produce a strong “culture of literacy” in a school. It should be established very early as a key element in any literacy leadership plan.

2. *Staffing plan to meet the needs of all students.* An important key to success in any organization is having the right people in the right places. One key staffing challenge for literacy initiatives involves finding the right people to provide intervention support for struggling readers. This usually involves thinking in new ways about school staffing resources, and it frequently involves professional development and acquisition of better instructional materials for support of reading intervention classes. Comments about this from two successful principals are:

When I came here, there were a few reading teachers in the Language Arts department. I have created a Reading Department separate from Language Arts.

We have experienced, trained teachers working with [our struggling readers], as well as two National Board Certified teachers that teach reading.

3. *Scheduling to meet the needs of all students.* The principal, along with the literacy leadership team, needs to examine the school schedule to determine how to provide enough time to meet critical literacy learning needs. Most successful schools have found a way to provide additional instructional time for their students who are reading below grade level. They do it in a variety of creative ways including scheduling extended instructional blocks during the day, before and after school, and in summer programs. Scheduling time/classes for reading intervention in high schools may present special challenges in some states because of course descriptions and the need to satisfy requirements for Carnegie units. Where this is the case, state level policy changes may be required before high schools have sufficient scheduling flexibility to meet the needs of their most struggling readers. In addition to scheduling time for interventions, successful schools also find ways to emphasize reading throughout the school day for all their students, by adding book clubs, reading activities during lunchtime, or literacy related home room activities.
4. *Professional development plan.* One of the most important keys to improved teaching is ongoing, job-embedded professional development. This is accomplished in a variety of ways – through hiring reading coaches, establishing grade level literacy study groups, providing demonstration teaching, providing frequent mini-professional developments on specific strategies presented by teachers or coaches, and attending professional meetings. Professional development to support more effective reading instruction should be an integral part of the school’s overall professional development plan, and the principal needs to insure that it fits well within other school priorities. One leadership key in the area of professional development is participation by the principal in as many of the professional development opportunities as possible. In the words of two more successful principals:

I participate in the study groups. If I’m not involved, they (teachers) have room to

criticize. I don't just go so they won't criticize. I go because first of all it is very interesting to me. I like to know what kinds of things my reading leadership team is studying. I want to know how and why it works. (I go) so I'm not just whistling Dixie when I go into the classroom.

The most essential things going on at my school that contribute to strong reading outcomes would be our reading coach, who provides reading strategies, inservice activities, and materials to the entire staff, the restructuring of our classes, use of data analysis, ..., and teacher implemented activities.

5. *Principal oversight and supervision activities.* There is an old adage that many successful principals like to quote, "If you expect it, then you need to inspect it". This brings us to the subject of principal or administrative classroom walk-throughs. Many successful principals, assistant principals, and other leaders visit all classrooms, including content area and intervention classrooms, regularly. They have usually discussed beforehand with the teachers the kinds of things they expect to see in these classroom visits, and teachers have received professional development in these areas as well. As one middle school principal expressed it:

I have to be walking the walk, [participating in professional development], in classrooms, conferencing with teachers and asking them specifically, "What are you doing to help students with reading? What are you doing to increase literacy of all types in your classroom?" If I walk in a classroom and it is naked, I will talk to the teacher and say where is your vocabulary wall? Teachers must use their environments to enhance students' experiences. Where are your reading materials? I provide funds for purchase of content-oriented materials that give different reading experiences for children.

And, from one particularly successful high school principal:

I must be a part of the team; the principal must know what's going on, be familiar with the reading programs, the strategies, and convey the fact that I am checking on implementation. The principal must be the instructional leader and set the tone. I am the one leading the staff development, leading the data meetings; we meet collectively and I am in there with them.

In most middle and high schools, the principal will need to share these oversight responsibilities with the school literacy leadership team, or other administrative leaders identified by that team. In regular meetings of the leadership team, classroom observations are discussed and plans are developed to provide professional development, or other forms of teacher support where needed.

6. *Sustaining implementation of the literacy plan.* There is no question that improving literacy outcomes for adolescents in middle and high schools involves hard work. It involves work on the part of students to read more and think more deeply about what they are reading. It requires work from teachers to add new skills to their teaching repertoire

and to find better ways to support student engagement in learning. Teaching struggling readers in a way that accelerates their reading development requires careful planning, disciplined and creative teaching, and relentless focus to meet the needs of every child. Finally, the change process itself is a difficult leadership challenge, and requires a thoughtful and energetic response from leaders. This is all a way of saying that part of the role of the principal and the literacy leadership team is to identify ways to regularly celebrate and reward student, teacher, and school-level accomplishments. This can be the truly “fun part” of the job, and successful schools find ways to recognize and reward all those who are contributing to successful literacy efforts.

Using data to guide instruction

This topic could easily have been included as one of the points in the previous section, but because it is so important, and also because it involves activities that many middle and high schools are just beginning to implement, it is presented as a separate section. However, we want to emphasize that establishment and oversight of an effective plan to collect and use student performance data to make decisions about instruction in your school is as much a leadership responsibility as any of the activities listed in the previous section.

What kind of reading assessments do you need? The answer to this question, of course, depends on what you need to know. The kinds of information needed to plan effective instruction for all students falls into two broad categories:

A. Information needed to help with overall planning and resource allocation, such as:

1. *What proportion of students are able to meet grade level standards at the end of each grade?* If this proportion is relatively low, this signals the need for strong, general improvements in all aspects of literacy instruction, including perhaps finding ways to devote more time for large numbers of students to improve reading skills. Information about student performance at the end of the year can also assist advance planning to meet needs for reading interventions in the following year.
2. *Are there any particular reading skills, or standards on which students are having special difficulties on the progress monitoring or year-end outcome test?* This type of information can be helpful in planning a school-level professional development emphasis or an instructional focus calendar. One successful principal commented:

We try to be proactive in foreseeing areas in need of improvement or restructuring. As soon as [state assessment] scores come out, I meet with my team to review the data and we plan an instructional focus calendar immediately. Teams of teachers then come in the summer and preplan activities. We focus on developing an instructional calendar with biweekly assessments.

3. *Are the interventions provided to struggling readers strong enough to effectively increase their ability to meet grade level standards?* This information is required to

determine whether interventions for struggling readers need to be strengthened or improved, which may involve allocating additional resources for interventions.

4. *What proportion of students in each classroom and grade level are becoming more proficient readers as the year progresses?* Are there particular areas of difficulty for students in specific classrooms, or at particular grade levels? This type of information can be useful in planning extra support for individual teachers, such as working with the reading coach, or pairing with a particularly strong teacher/mentor. Information about student progress during the year is also helpful to grade level teams as they consider ways to help students improve their performance on specific grade level literacy standards.

B. Information needed to guide instruction for individual students, such as:

1. *At the beginning of the year, which students are at special risk of not being able to meet grade level standards by the end of the year?* This information is useful for alerting teachers to students who may need special support in content area classrooms, and for scheduling intervention classes for other students. Of course, some decisions must be made substantially before the school year begins, and data from previous year's performance (item 1) can be used to identify the need for extra intervention resources that must be supported in the school budget for the coming year.
2. *Which students are making adequate progress, and which may need additional, or improved instructional support?* This information is essential to making important instructional adjustments or "mid course corrections" for individual students, such as increasing instructional time, reducing instructional group size, or shifting instructional approach, to increase rate of learning for individual students who might otherwise continue to make inadequate progress during the year. Comments from two successful principals on this topic include:

We look at interim assessment data and plan a Saturday academy (for the lowest 25% in) reading, math, and science. We do this about 13 Saturdays per year.

My assistant principals and I each work with a group of teachers. We go over data and come up with weak areas and work on developing instructional plans for their students. Everyone has to know where the school is and where the focus is. We put our focus calendar assessment in a data notebook containing the entire history of each student. Every two weeks we hit on some format of where we are and where we are going.

3. *What are the individual reading strengths and weaknesses of students?* For struggling readers in particular, it is important to understand which aspects of reading may require special instruction and support. As indicated earlier, a critical distinction for many students reading below grade level involves the extent of their word-level reading difficulties – can they read grade level text with reasonable accuracy and

fluency? If not, they will need extra support in these areas that other students may not need.

Assessments to answer the most important questions. Given the array of important questions outlined above, principals need to understand and utilize the information provided by at least four types of assessments. These assessments are:

1. *Formal outcome assessments.* Most states now require administration of formal end-of-year outcome assessments in reading for all students. These tests typically assess students' ability to understand and think about the meaning of text in ways that are defined in the state literacy standards. This type of test provides useful information about the proportion of students able to meet grade level standards in reading, and, depending on the test, might also provide information about student performance on specific standards. In some cases, it is possible to compare performance of students across several years to determine whether instruction is sufficiently strong to maintain grade level progress, or whether interventions are effective in raising overall levels of student performance from year to year.
2. *Formal or informal screening measures.* It is essential to have a reliable screening system at the beginning of the year to determine which students are in need of more intensive interventions and which may be expected to continue to make good progress without additional support in reading. Part of this "screening information" can be obtained from the prior year's outcome test, but many students will require additional assessment to plan appropriate instruction. Once the need for intervention is determined, if your school uses a published intervention program, these programs usually have placement tests that help plan initial instruction or place students in instructional groups. If your school does not use a published intervention program to provide support for struggling readers, there are a variety of both formal (standardized) and informal assessment procedures that can be used to determine instructional needs at the beginning of the year. For example, an experienced teacher can learn a great deal about a student's reading capabilities by simply asking him or her to orally read a passage from a grade level text, and then asking the student to make a summary of what they just read.
3. *Formal or informal progress monitoring assessments.* These types of assessments help determine whether students are making adequate progress in either their content area or reading intervention classes. For students in intervention classes, the need for progress monitoring is particularly strong. Their progress in acquiring the skills and knowledge that are the focus of their interventions (i.e. reading accuracy, reading fluency, vocabulary, reading comprehension strategies) needs to be regularly assessed to determine if the intervention they are receiving is working effectively to improve their reading skills. Many published intervention or supplemental reading programs provide periodic assessments that help to determine whether students are making adequate progress in the program.

Some schools are also administering "benchmark" progress monitoring tests to all their

students several times a year. These assessments are keyed to the grade level standards on their state accountability assessments and are used to identify any students not currently receiving interventions who have fallen behind during the year, and who may need some special support in order to meet grade level standards by the end of the year. A number of test development companies are currently working to provide support in this area. Many districts have also developed their own “benchmark” assessments that can be given several times a year. This type of progress monitoring can also be accomplished informally if teachers are trained to construct assignments or tests themselves that examine their student’s ability to meet grade level literacy standards throughout the year.

4. *Formal or informal diagnostic tests.* Most often, enough information is available from the previous year’s outcome test and the screening system used at the beginning of the year to get started in instruction. Once started in instruction, skilled intervention teachers can usually “diagnose” a student’s instructional needs through a variety of informal procedures, such as observing their responses to specific tasks, examining work products, or asking questions about their understanding or strategies. However, in some cases, students may have special difficulties that interfere with their response to instruction that may require formal diagnostic assessment. A general rule of thumb is that formal, time consuming diagnostic assessments should be given only when there is a need for specific information that can be used to guide instruction which cannot be obtained in some other, more efficient way. Lengthy diagnostic assessments should never be given to large groups of students as the first step in gathering information to guide instruction.

The need for some type of data management system. Using data effectively to make instructional decisions requires that it be available in a usable form to everyone who needs to see it. This includes the principal, the literacy leadership team, subject area team leaders, and individual teachers. Currently, schools are experimenting with a variety of systems to manage their assessment data, some of which are commercially available computer programs. Eventually, the most successful systems are likely to involve some type of computer support that allows data to be entered by teachers, but which can also accept “batch” data from other programs that automatically score different kinds of assessments. One of the first planning and discussion points for a school level literacy team to consider is what type of data management system they need in order to provide effective and timely access to all the data necessary to plan instruction for all students.

Decision making meetings. A universal feature of schools that are using data successfully to inform instruction is a regular pattern of meetings that bring together leaders and teachers to evaluate data and make decisions. Whether these are once a year meetings to evaluate the results from the end-of-year outcome assessments or beginning of year screening tests, or whether they are weekly or monthly meetings to evaluate individual student progress, they all have a similar structure. Critical elements are:

1. *Attendance of all who are necessary to help make and follow-up on decisions.* The principal may not be able to attend all of the “data meetings” held in the school, but

some sort of regular attendance and participation in these meetings by the principal will greatly increase their effectiveness. The principal, along with the literacy leadership team, should regularly consider which meetings most require strong school-level leadership to be successful.

2. *Systematic method for reviewing data.* Teachers should know ahead of time what types of data will be reviewed, and it is helpful to have standard forms, or formats for all teachers to use, so that data is considered in a consistent fashion.
3. *Recording decisions, and designating responsibility for follow-up.* As one strong principal pointed out, “You can have great data and make smart decisions, but if there is no follow-up, the meetings are essentially a waste of time.”

As a final note, interviews and observations of successful principals continually underline the fact that the principal’s attitude toward data and his or her consistent use of data in evaluating instructional progress and instructional needs sets the tone for the whole school. Effective principals are knowledgeable about student data, and actively use it to guide instructional decisions at many different levels.

Appropriate and effective instructional materials

Ensuring that teachers have useful, effective materials available to help them in their work is the third major aspect of the principal’s role discussed in this guide. Comments from several successful principals about this aspect of their work include:

I provide funds for purchase of content-oriented materials that give different reading experiences for students.

Through contributions by the PTSA (Parent Teacher Student Association) and SAC (School Advisory Committee), we have been able to acquire classroom sets of nonfiction books to appeal to the varied interests of the students

We provide resources specific to the subject area. For example, there is not a variety of timely books available on computer technology, so we subscribe to 4 or 5 different magazines and use those as reading tools for reading in the content area.

The largest expenditures for materials to enhance literacy outcomes fall into two categories: 1) books, magazines, and other reading material; and, 2) instructional programs and materials:

Using books to enhance literacy instruction. One of the most important principles from the scientific study of reading is that students are more likely to read materials written at a level they can comprehend with minimal difficulty and that focus on stories, themes, or content that are interesting to them. Almost anything students actually read, as long as it is written at the right level and is interesting, provides opportunities to improve literacy skills in ways that are not available from other activities. Teachers need additional books for their students to read for two major reasons:

1. Content area teachers need books written at different levels of difficulty that communicate information on similar topics so all students have the opportunity to read and acquire information they can contribute to classroom discussions. Content area teachers may also need additional books or magazines to spark interest in specific topics, or to provide opportunities for additional study and research.
2. Intervention teachers need carefully selected sets of books or magazines in order to provide reading experiences targeted at the right level of difficulty for their students, and that contain interesting and engaging topics for adolescents. One very successful intervention teacher commented, “It is amazing what I can teach when I have something interesting for my students to read.”

Instructional programs and materials. This category includes material and products specifically developed to help improve reading skills in adolescents. It includes:

1. *Computer programs.* A variety of computer programs are available to teach, and provide practice on literacy skills such as basic reading accuracy, reading fluency, and vocabulary. Careful use of these programs can effectively multiply the amount of targeted, engaged practice students receive. Although computer assisted instruction in reading for adolescents is not sufficiently developed to provide a sole remedy for struggling readers, it can provide powerful additional support when its use is incorporated as part of a comprehensive, teacher-guided instructional program.
2. *Intervention programs.* One reason to consider the use of well developed, research based intervention programs is that they contain a comprehensive scope and sequence and explicit instructional routines, along with appropriate practice materials. These instructional elements are particularly helpful to students who need strongly organized, explicit instruction to make significant gains in their reading skill. These types of programs can be particularly helpful to less-experienced teachers, as long as the teachers are well trained in program procedures and understand the rationale for the instructional approach. It is also helpful that new teachers, in particular, receive ongoing support so that the programs are implemented with fidelity.

One source of information about intervention programs suitable for adolescents is the “FCRR Reports” section of the website of the Florida Center for Reading Research (www.fcrr.org). Brief reports on a large number of intervention programs (both teacher led and computer based) have been written by experienced teachers and are available on this website. These reports provide a description of each program and its instructional aims, and they also discuss the extent to which the program provides support for instruction that is consistent with the findings from current research in reading. Two other useful sources of information about reading intervention programs for adolescents are: 1) *Adolescent literacy intervention programs: Chart and program review guide*, which is available free from the North Central Regional Education Laboratory (www.ncrel.org); and, 2) *Informed Choices for Struggling Adolescent Readers: A Research-Based Guide to Instructional Programs and Practices*, which

was published by the International Reading Association, and available from them or other bookstore outlets. In addition, the What Works Clearing House, sponsored by the U.S. Department of Education, has reports available that examine the research support available for a variety of reading intervention programs (www.whatworks.ed.gov/)

3. *Supplemental materials and programs.* Teachers, including content area teachers, may have need of materials that will help them provide more effective vocabulary instruction, lead better classroom discussions, or teach reading strategies more effectively. Usually, these supplemental materials provide specific suggestions for instruction, and they often contain instructional exercises and materials that help teachers acquire more powerful instructional skills in various areas.
4. *Books or articles for teachers to study together.* As part of ongoing professional development, teachers may require access to multiple copies of books or articles that can be discussed together in teacher study groups. As mentioned earlier, if student data suggest the need for additional study in a given area, the principal can support teacher study groups by providing appropriate research based materials for them to consider and by participating in study groups when possible.

Concluding Comments

This has been a very brief overview of the major elements involved in successful school-level efforts to increase academic literacy in middle and high school students. It is grounded in research on reading and reading instruction, and also incorporates information from principals who have led successful literacy initiatives in their schools. As brief as this guide is, the complexity of the effort it describes may seem daunting to principals who are just beginning systematic work on this topic in their schools. However, successful principals are also quick to acknowledge that creating an effective culture of literacy in a middle school takes time. The best advice is to examine the current situation in your school in light of the information in this guide, identify the things you are already doing well, and begin developing a plan to systematically increase your effectiveness in areas that need additional support. Although you may want to concentrate on only a few elements at a time, it is important to maintain a clear vision of the entire school-level system outlined in this guide, because it is the complete system, interacting in all its parts, which will eventually lead to the best outcomes for your students.

Recommendations for additional reading

Biancarosa, G., & Snow, C. (2006). *Reading Next: A vision for action and research in middle and high school literacy: A report to Carnegie Corporation of New York (2nd ed.)*. Washington, DC: Alliance for Excellent Education.

Irvin, J.L., Meltzer, J., & Dukes, M.S. (2007). *Taking action on adolescent literacy: An implementation guide for school leaders*. Alexandria, VA: Association for Supervision and Curriculum Development.

Langer, J.A. (2001). Beating the odds: Teaching middle and high school students to read and write well. *American Educational Research Journal*, 38, 837-880.

Meltzer, J., Smith, N.C., & Clark, H. (2002). *Adolescent literacy resources: linking research and practice*. Providence, RI: Northeast and Islands Regional Educational laboratory at Brown University.

Phillips, M. (2005). *Creating a culture of literacy: A guide for middle and high school principals*. National Association of Secondary School Principals. Reston, VA.

Short, D. J., & Fitzsimmons, S. (2006). *Double the work: Challenges and solutions to acquiring language and academic literacy for adolescent English language learners*. A report to the Carnegie Corporation of New York. Washington, DC: Alliance for excellent Education.

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