NCTE Principles of Adolescent Literacy Reform

A Policy Research Brief

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PREFACE

ver 8 million students in grades 4-12 read below grade level, and 3,000 students with limited literacy skills drop out of high school every school day. While the No Child Left Behind Act of 2001 triggered highly publicized reports on low levels of reading achievement in America's elementary schools, middle and high school students face different but no less important literacy challenges. Economic, social, moral, and political forces all point to the critical role literacy plays in our national culture and economy. Schools represent the most powerful and pervasive means of introducing the next generation into a culture of literacy. Traditionally, educators have focused on the development of literacy in the early grades, assuming that older students did not need special instruction. Recently, however, it has become clear that many middle and high school students are increasingly under-literate, lacking the complex literacy skills they will need to be successful in an information-driven economy. A recent report by ACT shows that only about half of our nation's high school students are able to read complex texts. Defined in terms of subtle,

involved, or deeply embedded ideas, highly sophisticated information, elaborate or unconventional structure, intricate style, context-dependent vocabulary, and implicit purposes, complex texts appear frequently in college and the workplace (ACT, 2006). The challenges posed by significant numbers of under-literate middle and high school students who lack the skills necessary to function successfully in today's world are as daunting as they are significant.

The National Council of Teachers of English (NCTE), the professional association representing over 50,000 English/language arts teachers, brings valuable insights and resources to this important issue. With its rich store of researchbased materials and its capacity to provide rigorous and systematic professional development and literacy coaching for middle and high school teachers, NCTE is uniquely positioned to take a leadership role in a national effort to improve the literacy capacities of adolescents. This document delineates the problems of adolescent literacy and outlines reforms NCTE has identified as necessary to address them.

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SECTION I OVERVIEW OF ADOLESCENT LITERACY

Introduction: A Growing Under-Literate Class

The problems of adolescent literacy echo through several recent reports.

- The American Institutes for Research (AIR) reports that only 13% of American adults are capable of performing complex literacy tasks.
- The National Assessment of Educational Progress (NAEP) shows that secondary school students are reading significantly below expected levels.
- The National Assessment of Adult Literacy (NAAL) finds that literacy scores of high school graduates have dropped between 1992 and 2003.
- The National Center for Educational Statistics (NCES) reports a continuing and significant reading achievement gap between certain racial/ethnic/SES groups.
- The Alliance for Excellent Education (AEE) points to 8.7 million secondary school students—that is one in four—who are unable to read and comprehend the material in their textbooks.
- The 2005 ACT College Readiness Benchmark for Reading found that only about half the students tested were ready for college-level reading, and the 2005 scores were the lowest in a decade.

Meanwhile, our knowledge-based society and information-driven economy increasingly demand a more highly literate population. In the 21st century United States, it is not enough to be able to read and write—the literacy demands of the global marketplace have grown

more complicated. The U.S. economy depends upon developing new generations of workers who are competent and confident practitioners of complex and varied forms of literacy. Reading complex texts requires ability to discern deeply embedded ideas, comprehend highly sophisticated information, negotiate elaborate structures and intricate style, understand context-dependent vocabulary, and recognize implicit purposes. Both higher education and the workplace present readers with complex texts. Without a highly literate pool of job applicants, employers are forced to look off-shore for well-trained and highly literate workers from other countries. In other words, our nation cannot afford an underliterate workforce.

> Our nation cannot afford an under-literate workforce.

At a time when the United States is fostering democracy in other parts of the world, thousands of American students are unable to use written information to make informed decisions. When these under-literate students leave school, they are not prepared to participate effectively in a democratic society. The powerful growth of the Internet and increased reliance on electronic communication—where complex literacy skills are essential—requires enhanced capacities of all who seek social and intellectual resources. The moral imperatives that led the United States to establish public schools during the early days of nationhood remain: schooling must produce citizens sufficiently skilled in literacy to help foster the greater good within our nation and in the world beyond.

What is Adolescent Literacy?

For adolescents, literacy is more than reading and writing. It involves purposeful social and cognitive processes. It helps individuals discover ideas and make meaning. It enables functions such as analysis, synthesis, organization, and evaluation. It fosters the expression of ideas and opinions and extends to understanding how texts are created and how meanings are conveyed by various media, brought together in productive ways. This complex view of literacy builds upon but extends beyond definitions of literacy that focus on features like phonemic awareness and word recognition.

Literacy skills come into play in many ways for all adolescents and adults, encompassing a broad range of domains. These include:

- analyzing arguments
- comparing editorial viewpoints
- decoding nutrition information on food packaging
- assembling furniture
- taking doses of medicine correctly
- determining whether to vote for a state amendment
- interpreting medical tables
- identifying locations on a map
- finding information online

Literacy enables learning in a variety of disciplines in complex and important ways. Research shows, for example, that a media-literacy curriculum can lead students to read with higher Literacy is not a technical skill acquired once and for all in the primary grades.

comprehension scores, write longer paragraphs, and identify more features of purpose and audience in reading selections (Hobbs & Frost, 2003). Moreover, literacy is not a technical skill acquired once and for all in the primary grades. Rather, students develop it over many years, and that development continues well into adolescence and beyond.

Adolescents bring many literacy resources to middle school and high school, but they face several challenges. The academic discourses and disciplinary concepts in such fields as science, mathematics, and the social studies entail new forms, purposes, and processing demands that pose difficulties for some adolescents. They need teachers to show them how literacy operates within academic disciplines. In particular, adolescents need instruction that integrates literacy skills into each school discipline so they can learn from the texts they read. Adolescents also need instruction that links their personal experiences and their texts, making connections between students' existing literacy resources and the ones necessary for various disciplines (Alvermann & Moore, 1991). When instruction does not address adolescents' literacy needs, motivation and engagement are diminished. Motivation is the factor that leads students to read or not, and engagement means choosing to read when faced with other options (Guthrie and Wigfield, 2000). Without a curriculum that fosters qualities of motivation and engagement, adolescents risk becoming under-literate.

What Strategies Foster Adolescent Literacy?

Research offers many effective strategies that promote and increase adolescent literacy. Reforming programs of adolescent literacy demands strategies that target motivation, comprehension, and critical thinking.

Motivation

The question of motivation presents one of the most perplexing issues of adolescent literacy. Many students who are able to read and write choose not to, rendering many forms of instruction ineffectual. Furthermore, as this behavior becomes ingrained, students can become less likely to become engaged with literacy practices. Research shows, however, ways to increase student motivation toward literacy.

- *Strategy Instruction:* Teaching students to monitor their own literacy practices, to look for information, to interpret literature, and to draw on their own prior knowledge enhances motivation (Guthrie et al., 1996).
- *Diverse Texts:* Sustained experience with diverse texts in a variety of genres that offer multiple perspectives on life experiences can enhance motivation, particularly if texts include electronic and visual media (Greenleaf et al., 2001).
- *Self-selection of Texts:* Many texts must be read in common by an entire class, as the curriculum dictates, but allowing some discretion for students to choose their own texts increases motivation, especially because these selections can help students make connections between texts and their own worlds. Of course, reading self-selected texts also increases reading fluency, or the ability to read quickly and accurately (Alvermann, et al., 2000; Moje et al., 2000).

Comprehension

Many students leave elementary school able to decode language without fully understanding what it says. Reform in adolescent literacy instruction must include attention to students' ability to comprehend what they read. Fortunately, research-based strategies are available to support such learning.

- *Vocabulary Development:* Reading, writing, speaking, and listening can all contribute to vocabulary development. Since each discipline has its own vocabulary, students need both direct and indirect instruction to actively learn new words (Dole, Sloan, and Trathern, 1995.)
- *Discussion-based Approaches:* Making meaning from texts is crucial to reading comprehension, and focused discussions about academic texts can help students learn to read better at the same time that they learn more about a specific field. (Applebee et al., 2003). Strategies like reciprocal teaching, question generating, and summarizing can foster discussions.

Critical Thinking

Effective literacy education leads students to think deeply about texts and use them to generate ideas and knowledge. Students can be taught to think about their own thinking, to understand how texts are organized, to consider relationships between texts, and to comprehend complexities.

- *Self-monitoring:* Focused instruction can teach students how to consider their own understandings of a text and learn how to proceed when their understanding fails (Bereiter and Bird, 1985).
- *Interpretation and Analysis:* A successful program of literacy education enables students to dissect, deconstruct, and re-construct texts as they engage in meaning making (Newmann, King, & Rigdon, 1997).

- *Multi-disciplinary:* Critical thinking takes slightly different form in each discipline, and effective instruction for adolescent literacy helps students develop capacities for critical thinking in each discipline (Greenleaf et al., 2001).
- *Technology:* Many adolescents are drawn to technology, and incorporating technology into instruction can increase motivation at the same time that it enhances adolescent literacy by fostering student engagement (Merchant, 2001).

Assessment

Assessment is often seen as external to instruction, but it is an essential part of teaching. Both teachers and students benefit from multiple forms of evaluation. While high-stakes tests rarely provide feedback that has instructional value, other forms of assessment can foster literacy development in adolescents.

- Ongoing Formative Assessment: Assessment that provides regular feedback about student learning has benefits for students and teachers. It can enhance motivation as well as achievement among students. Teachers who receive daily or weekly information about student development can intervene effectively (Biancarosa and Snow, 2004).
- *Informal Assessment:* Assessment need not be an onerous task for teachers since there are many ways to evaluate student achievement informally. Brief responses to a student journal, students' written summaries of learning at the end of class, or a student-teacher conference are examples of informal assessment that does not require a grade but provides formative evaluation of student achievement.
- *Formal Assessment:* The test at the end of a unit or the paper written in response to a multi-week assignment are examples of formal assessment that is usually graded and can

be described as summative rather than formative. When prepared and graded by a teacher as part of ongoing instruction, formal assessment can provide useful insights into student learning (Darling-Hammond et al., 1995).

Meeting the Challenge

Reform designed to improve adolescent literacy through increased motivation, comprehension, critical thinking, and classroom-based assessment must contribute to measurable gains in student achievement. Instruction that foregrounds instructional experiences like these will require substantial reform, both in teaching practices and in the school infrastructures in which they are enacted. Teachers possess the greatest capacity to positively affect student achievement, and a growing body of research shows that the professional development of teachers holds the greatest potential to improve adolescent literacy achievement. In fact, research indicates that for every \$500 directed toward various school improvement initiatives, those funds directed toward professional development resulted in the greatest student gains on standardized achievement tests (Greenwald et al., 1996).

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SECTION II PROFESSIONAL DEVELOPMENT: THE ROUTE TO REFORM

The Importance of Teacher Quality

Former U.S. Secretary of Education Rod Paige recognized the value of well-prepared teachers: "We know that being a highly qualified teacher matters because the academic achievement levels of students who are taught by good teachers increase at greater rates than the levels of those who are taught by other teachers" (U.S. Department of Education 2003). In making such claims, Paige drew upon research that documents how well-prepared teachers raise the achievement of all students, not just those who were already doing well (Babu and Medro, 2003; Sanders and Rivers, 1996).

The term "highly-qualified teacher," used by Paige and many others, entered the language of education with the No Child Left Behind Act of 2001. According to NCLB, highly-qualified teachers have a BA degree, full state certification, and knowledge of the subject(s) they teach. Teachers can demonstrate subject-matter knowledge with a major—or credits equivalent to a major—in the subject they teach, a passing grade in a state test, or a graduate degree.

For teachers in middle and high schools, however, literacy is not, for the most part, an area of expertise. Those who can be described as highly qualified in math, social studies, English, or science rarely have any significant training in literacy instruction. Traditionally teacher preparation programs include little (if any) course work in literacy, so it is possible for teachers to be identified as highly-qualified even though they were not prepared to address the challenges of adolescent literacy. Many content-area teachers describe themselves as not prepared to teach literacy within their content area (Phillips, 2002). Ironically, many secondary school teachers resist the work of reading specialists in their schools (Darwin, 2002).

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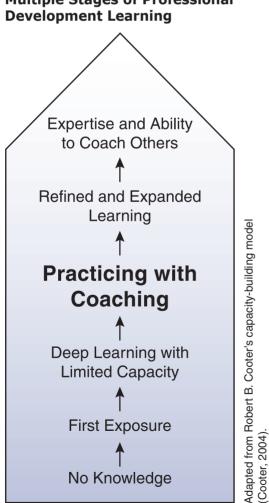
Centrality of Professional Development

Because middle and high school teachers who are highly qualified in some ways can lack fundamental knowledge about literacy development, professional development must be at the center of any reform effort that seeks broad improvement in adolescent literacy. Without additional training, teachers at the secondary level remain largely unable to take up the task of enhancing adolescent literacy. Given the demonstrated impact of professional development upon student achievement, investing in professional development is both the most cost-effective and systematic way to address the challenges of adolescent literacy at the national level (Greenwald et al., 1996).

The quality of professional development is, of course, a key concern. All professional development is not created equal, and much of what is described as professional development is not sustained or in-depth enough to foster significant and lasting teacher learning. Because research shows that student achievement depends upon teachers learning from professional development, it is important for high quality professional development in adolescent literacy to be the standard (Pang and Kamil, 2003).

High Quality Professional Development

Research on professional development has focused on both teacher learning and student learning. Like all learning, teacher learning occurs over time, and the diagram below shows how effective professional development moves teachers, over time, from little or no knowledge to expertise.



Multiple Stages of Professional

Unfortunately much professional development is concentrated at the level of "first exposure" and comes in the form of a single workshop or presentation on a given teaching strategy. "Deep learning," by contrast, involves extended engagement with new ideas and strategies, such as reading and discussing a text or participating in a demonstration. At the "first exposure" stage, teachers can be described as having knowledge about a given approach but limited capacity to implement it. By contrast, when teachers are able to practice approaches with support from a mentor or coach who can offer suggestions and encouragement, they are able to implement newly-acquired strategies effectively. After teachers have had opportunities for supported practice, they then engage in refined and expanded learning, which is characterized by a comfortable incorporation of new approaches into regular classroom practices. Professional development reaches its ultimate stage when teachers feel comfortable supporting others in learning a new approach.

Time is not, of course, the only important feature of professional development. The remainder of this section will discuss other aspects of all effective professional development. The next section will consider features specific to professional development focused on adolescent literacy.

Involvement and Commitment of all Stakeholders

Teachers and staff who will take part in or who are affected by a program of professional development should be part of the planning process, particularly as fundamental decisions are being made. Teacher knowledge about students can help make needs clear—in a needs assessment, for instance-and faculties who are involved in planning professional development are much more likely to "buy into" the content of the ensuing program. Rather than bringing an outside expert to deliver strategies that will

then be implemented by individual teachers in the privacy of their own classrooms, teachers and administrators should work together to determine needs, decide on a course of action, and implement development plans (Gusky and Huberman, 1995).

Connection with Local Instruction

To have significant impact, professional development should link to other parts of the instructional infrastructure in a given school. Each school has a unique context, and the best professional development takes account of the multiple factors that contribute to student learning in that context. These include the community of which the school is a part, student standards, curricular frameworks, textbooks, instructional programs, and assessments. Attention to the local context also includes understanding and acknowledging the knowledge and experience teachers bring to professional development. When teachers can make connections between mandated standards or features of the existing curriculum and ideas forwarded in professional development, they are much more likely to incorporate new approaches into their pedagogical repertoires. Professional development can also help teachers understand and work with standards and curricular frameworks so that they implement them more substantially in the classroom (Dutro et al., 2002).

Creation of a Professional Community

Isolation is a difficulty faced by many teachers, and it frequently leads individuals to leave the profession (Hanushek et al., 2001). Conversely, teachers who belong to a study group, a learning community, or some other collaborative enterprise are most likely to remain in the profession as highly successful instructors. Effective professional development fosters collegial relationships, creating professional communities where teachers share knowledge and treat each other with respect. Within such communities teacher inquiry and reflection can flourish, and research shows that teachers who engage in collaborative professional development feel confident and well prepared to meet the demands of teaching (Holloway, 2003). Furthermore, teachers who reflect on their own work engender high-achieving students (Darling-Hammond & McLaughlin, 1995).

Evaluation

Evaluation should be part of the plan for all professional development. Without careful consideration of its effects, professional development cannot improve. Guskey (2000) suggests that five levels of evaluation be included in order to get a full portrait of the strengths and weaknesses of a given program of professional development. The five are:

- participants' reactions
- participants' learning
- organization support and change
- participants' use of new knowledge and skills
- student learning outcomes

Collecting and analyzing data regarding each of these areas is demanding, but without such information it is impossible to determine the effectiveness of professional development.

Effective Professional Development Programs

- Continue beyond a single session or strategy
- Require the commitment of all stakeholders
- Connect with local instruction
- Create a professional community
- Include evaluation
- Result in student achievement

Professional Development and Student Achievement

Student development and achievement is the ultimate measure of success, and research shows that professional development improves student performance. Quality of teacher influences student achievement more than factors like class size and classroom peers, and effective teachers produce better achievement regardless of which curriculum materials or pedagogical approaches are used (Darling-Hammond & Youngs, 2002). Not surprisingly, when professional development is tailored to classroom practice or content, it has the greatest impact on student achievement (Garet et al. 2001; Kelleher 2003). In short, investment in professional development pays large dividends in student achievement.

A growing body of research documents the connection between systematic and sustained professional development and improved student achievement. Greenwald et al. (1996) found that moderate increases in professional development could lead to significant increases in student achievement. Estrada (2005) found that an extended program of professional development improved student achievement. She also observed that this can result when "all stakeholders, including teachers, researchers, and professional developers [are] willing to face the facts of student performance levels, take responsibility, and take the risks inherent in working toward improvement" (355). Langer (2000) studied the links between teachers' professional development and student achievement over five years and found that students whose teachers participated in professional development improved significantly. She writes, "The teachers

Investment in professional development pays large dividends in student achievement.

in schools that are beating the odds are in touch with their students, their profession, their colleagues, and society at large . . . The knowledge and experiences gained in their wide professional arena affect the classroom context, their students' learning and achievement" (434).

SECTION III PROFESSIONAL DEVELOPMENT TO IMPROVE ADOLESCENT LITERACY

The features of professional development discussed in Part II are important for professional development focused on adolescent literacy. Extended time for teachers to move from little or no knowledge to being able to mentor others in specific approaches; the involvement of all stakeholders; connection with the local infrastructure; and the creation of a professional community—all of these contribute to effective professional development. In addition, some features of professional development apply specifically to those concerned with adolescent literacy: professional communities in secondary schools, interdisciplinary collaboration, and literacy coaching.

Professional Development to Improve Adolescent Literacy

- Builds professional community
- Encourages interdisciplinary collaboration
- Relies on qualified literacy coaches for guidance

Professional Communities in Secondary Schools

Collaboration among teachers is always important to student learning because it enables students to see connections across the curriculum. Such collaboration is especially important for **P**rofessional communities among teachers are most common in elementary schools and least common in secondary schools.

fostering achievement in literacy among adolescents because literacy enables and requires learning across the curriculum. Unfortunately, as research shows, professional communities among teachers are most common in elementary schools and least common in secondary schools (Louis & Marks, 1996). Features such as shared values, focus on student learning, deprivatized practice, and reflective dialogue are much less common among middle and high school teachers than among their peers in elementary schools.

Reform aimed at improving the literacy achievement of adolescents will need to encourage professional development that helps teachers create professional communities. The implementation of new approaches offered by professional development requires the existence of a strong professional community that creates a safe environment for teachers to experiment with innovation (Bryk & Schneider, 2003). Professional development can help create professional communities in schools. As the research of Louis & Marks (1996) shows, characteristics of professional communities include:

- Shared values
- Focus on student learning
- Collaboration
- Deprivatized practice
- Reflective dialogue

Interdisciplinary Collaboration

Adolescent literacy is necessarily interdisciplinary because middle and high school students must read and write in such fields as science, mathematics, and social sciences as well as English. This means that they need to learn the forms, purposes, and other textual demands specific to multiple disciplines (Kucer, 2005).

> Adolescent literacy is necessarily interdisciplinary.

Students who have opportunities to read and write many types of texts become fluent, broaden their vocabularies, and expand their abilities as readers and writers. In particular, students who participate in discussions that develop their understanding of discipline-specific content learn to read and write efficiently and effectively (Applebee et al., 2003). They develop the ability to recognize how texts are organized in different disciplines and begin to consider the various social, political, and historical contexts and purposes that surround all texts.

Whether they are in a science or English class, adolescents need to understand literacy as an array of related and complex mental and social activities rather than a set of discrete skills. This, in turn, will lead them to competence and engagement as learners (Allington, 2001; Alvermann & Moore, 1991). When students in middle and high school experience effective literacy instruction, they develop the ability to think critically about their own reading and writing practices. They also become able to explain the meaning of a text and to recognize when they do not understand, which is a first step in helping them move to understanding. Willingness to monitor their own literacy learning is one indication of student engagement, and research shows a high correlation between such engagement and improved literacy learning (Taylor et al., 2003).

Research shows that professional development associated with writing across the curriculum leads to more effective interdisciplinary collaboration among teacher learners (Winchester School District, 1987). When teachers from several disciplines work together in the context of professional development, they are much more likely to develop working relationships. Furthermore, when teacher learning extends across disciplines it also enhances student achievement (Arbaugh, 2003; Burbank & Kauchak, 2003).

Multi-modal literacy, literacy practices that can be used in the context of multiple sites/texts/ media, supports and is supported by interdisciplinarity. Multimodal texts are inherently interdisciplinary because creation of them draws upon several fields of inquiry. Similarly, the multidisciplinary nature of literacy leads naturally to multi-modal forms that combine visual and verbal texts in various ways. The most promising form of professional development overall appears to be literacy coaching.

Literacy Coaching

The most promising form of professional development overall appears to be literacy coaching (Kamil, 2003). In this work, literacy specialists consult with content teachers to help them infuse literacy instruction into their teaching. Although qualifications and responsibilities of literacy coaches vary from one site to another, most agree that coaches model instruction, observe teachers and make suggestions, lead teacher inquiry groups, and disseminate research findings. Qualifications include 1) a strong foundation in literacy, 2) leadership skills, and 3) familiarity with adult learning. Unlike reading specialists who spend most of their time working with students, literacy coaches focus on teacher learning, concerning themselves with increasing the knowledge and skills of teachers and administrators.

Literacy coaches can help teachers:

- provide a bridge between adolescents' rich literate backgrounds and school literacy activities
- work on school-wide teams to teach literacy in each discipline as an essential way of learning in the disciplines
- recognize when students are not making meaning with text and provide appropriate,

strategic assistance to read course content effectively

- facilitate student-initiated conversations regarding texts that are authentic and relevant to real life experiences
- create environments that allow students to engage in critical examinations of texts as they dissect, deconstruct, and reconstruct in an effort to engage in meaning making and comprehension processes.

Together with the International Reading Association (IRA) and other professional associations, NCTE has developed standards for what literacy coaches should know and be able to do to help teachers. These standards provide guidance for schools seeking to include literacy coaching in their professional development plans. Briefly, the standards (see list on page 15) include general ones directed toward all coaches and content-area-specific ones grounded in the disciplines.

NCTE is addressing this challenge by establishing, in cooperation with the International Reading Association, the Literacy Coaching Clearinghouse. The Clearinghouse will provide research-based information and service to literacy coaches and educational leaders in schools across the nation.

In addition, the Clearinghouse will lead further research on literacy coaching in order to answer questions such as these:

- In what domain—student learning, teacher learning, or school climate—is the impact of literacy coaches greatest?
- How can schools collect their own data about the effects of literacy coaching on student achievement?
- How can we compare literacy coaches across contexts?
- What are the characteristics of highly effective coaches?

Continued on page 16

STANDARDS FOR LITERACY COACHES *

1) Skillful Collaborators

Working with the school's literacy team, literacy coaches determine the school's strengths (and need for improvement) in the area of literacy in order to improve students' reading, writing, and communication skills and content area achievement.

2) Skillful Job-Embedded Coaches

Literacy coaches work with teachers individually, in collaborative teams, an/or with departments, providing practical support on a full range of reading, writing, and communication strategies

3) Skillful Instructional Strategists

Literacy coaches lead faculty in the selection and use of a range of assessment tools as a means to make sound decisions about student literacy needs as related to the curriculum and to instruction.

- 4) Content area literacy coaches are accomplished middle and high school teachers who are skilled in developing and implementing instructional strategies to improve academic literacy in English language arts.
- 5) In English language arts, mathematics, science, and social studies literacy coaches are familiar with the content area and know how reading and writing processes intersect with the given discipline.

* For a full description of each standard, see

http://www.ncte.org/library/files/About_NCTE/Education_Issues/coaching_standards.pdf

- What is the relationship between coaches' familiarity with content area standards and effective integration of literacy instruction into content area lessons?
- How does a coach's knowledge in a given content area affect the teacher's sense of expertise?
- Which qualities of literacy coaches correlate most highly with enhanced student achievement in literacy?
- What reading comprehension strategies are best received by teachers?
- Which comprehension strategies and practices are most effective for students?
- What is the optimum context for teacher-literacy coach planning and evaluation of instruction?
- How do coach-led teams allocate literacy and content area instruction?
- What differences between content-area teachers' practices can be attributed to participation in coach-led teacher meetings?

Answering questions like these can be described as a practice-embedded research (Donovan, Wigdor, and Snow, 2003). Such research starts with the practice as it exists and, building on successful teacher practices already in place, addresses practitioner questions while also accumulating data across sites. The findings will

It will take approximately ten thousand literacy coaches to help the nine million fourth- through twelfth-graders who struggle with reading (Sturtevant, 2003).

inform the training and evaluation of literacy coaches. Ultimately, of course, the Clearinghouse will be an instrument of reform focused on improving student achievement by enhancing the development of under-literate adolescents.

CONCLUSION

Reform in adolescent literacy requires a recognition of the seriousness of the problem as well as a reconceptualization of the role of secondary school teachers in all fields, including the introduction of new approaches to teaching, new forms of collaboration, and systematic assessment of results. Professional development promises to be the most productive area on which to focus reform efforts because research shows that professional development yields the greatest improvement in student achievement. The most effective form of professional development is offered by literacy coaches, and the need is urgent. It will take approximately ten thousand literacy coaches to help the nine million fourth- through twelfth-graders who struggle with reading (Sturtevant, 2003). Meeting this challenge will require concerted and collaborative efforts of a number of groups, including teachers, administrators, policy makers, higher education, and professional associations like the National Council of Teachers of English.

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