The Mid-Atlantic Regional Educational Laboratory

The LSS Review

Laboratory for Student Success

a catalyst for merging research, policy, and practice

Volume 2 • Number 4 • August 2003

Improving Reading Achievement Through Professional Development

Reports and Recommendations From a National Invitational Conference

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The causes of reading failure are numerous and complex. Until recently, ineffective teaching was rarely cited as a cause of reading problems. Nevertheless, it is reasonable to assume that if the instruction provided by the school is ineffective or insufficient, even some otherwise capable learners will have difficulty learning to read. Higher education institutions, particularly teacher preparation programs, have a responsibility to produce qualified teachers with in-depth knowledge of subject content and strong pedagogical skills. These institutions share accountability for teacher quality, and ultimately, student achievement, with teachers, principals, and other school personnel. However, throughout the country, people are recognizing that excellence as a teacher of reading is not attained only upon graduation from a teacher preparation program followed by occasional participation in a district's inservice day activities, nor is it attained through graduate coursework alone.

Rather, improving literacy instruction through professional development is an ongoing process involving all of the members of a schoolwide literacy team in activities that will help them become more effective in what they do. Fortunately, the importance of career-long, high-quality professional development has not gone unnoticed. It has become a priority in the many efforts enlisted to reform schools and improve student performance in reading, including the recent No Child Left Behind legislation.

This emphasis on professional development has come relatively late in the current reform movement, however. The National Reading Panel (NRP) report (NICHD, 2000) concludes that professional development has a positive effect on the improvement of literacy instruction. Although the research base on which this finding was made was small, the findings were uniform: If teachers changed their teaching as a result of professional development, the reading achievement of their students improved. What the NRP did not find was agreement about the content of professional development. However, one other key factor emerged in the analysis: To achieve growth in student abilities, sustained allocation of resources is required. Beyond that, though much has been learned about what constitutes effective professional development, there is little research-based evidence about how to design professional-development programs and activities such that changes in teacher instructional practices can be made permanent.

Fortunately, the current climate of reform offers an ideal time to systematically study this issue. Unfortunately, the dismal reputation of professional development is both widespread and well deserved. Instead of a history characterized by steady progress based on advances in knowledge and understanding, staff development is characterized primarily by disorder, conflict, and criticism. Teachers complain that their district's entire professional-development program consists of one or two inservice days each year. Very often, the workshop topics are not the ones they care most about. Even when the topics are relevant and the ideas well presented, there is little or no follow-up. In addition to the ineffectiveness of annually scheduled inservice days, teachers say they are frustrated by the lack of sufficient professional development when new materials, technologies, and curriculum initiatives are introduced. Moreover, these issues are only part of the problem.

Many teachers feel that professional development would be greatly improved if they were more involved in the decision making and planning. Teachers understand that there are many factors and many people to be considered; they simply want some input. If, indeed, the school district is operating on the basis of a larger vision, it is not always evident to them. They do not share in that vision. These concerns are extremely pertinent in the area of literacy instruction, since it is an area where much of the professional-development programming is targeted and it is often the focal point of reform.

To address these and other important professional-development issues, the National Invitational Conference, "Improving Reading Achievement Through Professional Development," cosponsored by

The LSS Review is a product of the Mid-Atlantic Regional Educational Laboratory, the Laboratory for Student Success (LSS), one of ten regional educational laboratories funded by the Institute of Education Sciences (IES) of the U.S. Department of Education. LSS seeks to provide research-based information to significantly improve the educational capacity of the region, including Delaware, Maryland, New Jersey, Pennsylvania, Washington, DC, and the nation. Inquiries about the work of LSS should be sent to the Outreach and Dissemination Unit, Temple University, 1301 Cecil B. Moore Avenue, Philadelphia, PA 19122-6091, lss@temple.edu.

by Rutgers University, The Carnegie Corporation of New York, and The Laboratory for Student Success (LSS), The Mid-Atlantic Regional Educational Laboratory at Temple University, was convened in Washington, DC, November 13–14, 2002. The purpose of the conference was to bring together teachers, principals, reading specialists, teacher educators, and other education professionals to discuss the current best thinking on what teachers and administrators need to know and do to provide quality literacy instruction for optimum student performance. The conference discussions included topics such as teacher preparation standards, what teachers need to know and do to elicit the best reading performance from their students, how to engage students in reading and writing activities, training self-reflective teachers who translate reflections on classroom practices into strategies for high-quality instruction, and the role of principals in leading professional-development efforts and improving reading instruction.

Throughout the conference, the participants were organized into small work groups. The work groups were designed to elicit next-step recommendations for improving reading achievement through professional development, the ultimate goal of the conference attendees. The recommendations can be organized into the following topics.

Teacher Preparation

Participants' recommendations for teacher preparation include the following.

1) Teacher education institutions should determine what teacher preparations are beneficial and train their teachers accordingly (e.g., Teachers are often forced to put aside their college training and adapt to the school context, so teachers should be trained to be flexible).
2) Pre-service education should be linked with inservice professional development; schools should collaborate with pre-service institutions regarding school-based professional development.

Content and Process

Professional development should be
1) research-based;
2) thoughtfully planned and ongoing for teachers of all levels of education and experience;
3) an integral part of the infrastructure of the school (e.g., included in teacher contracts);
4) collaborative, such that teachers, other school staff, and outside literacy professionals participate in the transfer of knowledge, skills, and learning;
5) determined by student needs, teacher needs, and the needs of parents and the larger community; and
6) encouraging to teachers to recognize individual student differences, strengths, and weaknesses, and adjust their instruction accordingly.

Tailoring Professional Development

Participants' recommendations for tailoring professional development to meet diverse needs include the following.

1) Professional development should be grounded in children's learning processes.
2) The school's vision for reform should be shared by all in the school community, including principals, teachers, and other staff members.
3) Professional development should be designed to attend to individual teacher needs and encourage teachers to reflect on and evaluate their teaching practices.
4) Professional development should encourage the formation of teacher study groups in which teachers can discuss their goals, needs, and perceptions of student needs.

Building a Community of Learners

An important by-product of high-quality professional development is the creation of a community of learners in which the transfer of knowledge, ideas, and skills abounds. The participants agreed that
1) professional development should include opportunities for multidisciplinary collaboration among teachers, while supporting the shared vision of the school;
2) teachers' classroom practices should be grounded in research; research findings should be linked to the shared vision and teachers should keep abreast of current best thinking and practices in their field;
3) special education and regular education teachers should seek and conduct separate research;
4) teachers should be included in data-driven decision making regarding professional development and reform efforts;
5) teachers should be encouraged to offer and accept criticism and other feedback from their colleagues;
6) professional development should be deliberate and structured (scheduled meetings and planning times); and
7) "master teacher" leaders that teachers trust should be appointed to focus on coaching and staff development.

Role of Administrators

Administrators should
1) support professional development for teachers, encourage principal participation in professional development, and participate in professional development themselves, especially literacy professional development;
2) be aware of teachers' needs and share observations with appropriate personnel and be creative with scheduling and planning preparation time;
3) share leadership and coordinate efforts with teachers and principals;
4) be effective leaders of instruction and use the services of specialists and resource teachers;
5) focus on coaching teachers rather than criticizing and evaluating; and include principals and other school staff in coaching and scaffolding teachers after professional-development training;
6) be aware that they share the responsibility (accountability) for student outcomes with teachers and principals;
7) along with principals, be aware of their particular school environments, situations, and classroom needs and encourage partnerships with parents to meet these needs;
8) develop the infrastructure to maintain professional-development efforts when leadership changes or support is withdrawn;
9) think about and be prepared for (future) planning with a limited budget or no budget; and
10) be involved in professional networks and collaborate with other administrators including principals.

Reference

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Teachers Who Improve Reading Achievement

What Research Says About What They Do and How to Develop Them

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We need good teachers to improve reading achievement. How to develop such teachers, however, is a matter of current debate. Today, there is a trend toward minimizing teacher development. Programs such as "Teach for America" minimize teacher development by arguing that teachers only need a college degree and verbal ability. Others minimize teacher development by arguing that teachers only need more courses, specifically courses in linguistics and the structure of language. Still others minimize teacher development by arguing that teachers only need "scientifically proven" programs and by devaluing both professional teaching and teacher development. But teacher development cannot be minimized if we are to meet society's rising demands for (a) improved literacy among poor children and (b) citizens who use text as a vehicle for higher order thinking.

Evidence from research on teacher effectiveness and professional development suggests that improving the achievement of poor students and cultivating the higher order thinking skills of all students requires thoughtfully adaptive teachers. Developing adaptive teachers requires more professional development, not less.

Effective Teaching Research

Research on reading teacher effectiveness indicates that teachers who produce the greatest achievement gains adapt their instructional practices to meet individual student needs. Classroom teaching is complex; children respond differently during instruction. To be effective under these conditions, teachers operate from a foundation of routine and established "best practices," thoughtfully adapting and modifying their instructional techniques when situations demand it, often employing several ideological and methodological practices within a single lesson. In short, to be effective, teachers must be thoughtful, creative, and responsive, selecting strategies and practices in response to students and to curricular demands. Hence, the defining element of effective teachers is the ability to be instructionally adaptive in response to changing situations.

Teacher Development Research

Research on teacher development reflects two distinct perspectives. In one, professional development is thought of as "training"; in the other, it is thought of as "educative." The goal of training is for teachers to learn about and implement practices recommended by authorities. The emphasis is on compliance. In its extreme form, teachers are expected to follow scripts without variation. The goal of educative approaches, in contrast, is teacher autonomy and decision making. Educative approaches are characterized by voluntary involvement, collaboration, inquiry, reflection, and teacher construction of knowledge.

Although educative approaches to teacher development require substantial time and effort, there is evidence that educative approaches increase teacher thoughtfulness and promote autonomous and adaptive instructional decision making. However, educative models of professional development are not now standard in the field. Implementing such models requires changing what we teach teachers and how and when we teach it.

Thinking Differently About What We Teach Teachers

Most professional-development efforts (preservice or inservice) disseminate knowledge about various aspects of effective reading instruction. But disseminating knowledge does not necessarily prepare teachers to adapt instruction when things go awry. To be adaptive, teachers must take charge of professional knowledge, manipulate it in response to observed conditions, and transform it to fit the situation. Consequently, the goal of professional development should not be simply to disseminate knowledge to teachers; the goal should be to teach teachers to transform knowledge and make judgments about how to adapt knowledge to different instructional situations and different students.

Thinking Differently About How We Teach Teachers

Professional development often employs lecture methods; information is "delivered" to a relatively passive audience of teachers. Lectures encourage teachers to think of themselves as working under and complying with others, just as scripts encourage teachers to comply rather than adapt. To promote adaptive teaching, professional development should be collaborative; teachers should work with experts to construct responses to teaching problems. Collaboration is promoted when (a) professional development is rooted in field-based inquiry (e.g., focusing on solving real problems encountered in real teaching situations); (b) reflective thought is emphasized; and (c) teachers, principals, staff developers, and teacher educators work together in a spirit of egalitarianism.

Thinking Differently About When We Teach Teachers

To be effective, professional development must be ongoing. This is because teachers must change as changes occur in schools and districts. Innovations interact with other good ideas, or with changing conditions in the teaching environment, requiring strategy adjustments. In short, teaching means changing as conditions change, so growth in teaching expertise is a career-long endeavor.

(**Teachers**, continued on p. 23)

Sources of Standards for Teacher Preparation

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What do teachers and administrators need to know and be able to do in order to provide quality literacy instruction at various educational levels? How do we determine what teachers and administrators need to know and be able to do? These questions raise issues that were the focus of the National Invitational Conference on Improving Reading Achievement Through Professional Development. In this article we examine the implications of what we know about standards and professional development for addressing these critical questions. First, we discuss standards-based reform and how teacher professional development emerged as a central component of reform. Second, we review teacher standards and the various sources for grounding them. Finally, we argue that research on teacher preparation and its implications for student achievement is essential to advancing the field.

Standards-Based Reform

The logic of standards-based reform dictates setting clear goals (i.e., standards) and assessing them. Standards determine what students should learn; the assessments determine whether the students have learned it. If standards and assessments are aligned, teachers and students will achieve the goals—meet the standards. If students have not met the standards, then the system must change in response. The logic is intuitively appealing yet deceptively simple because, as witnessed by the current reform movement, what is simple and logical is not always realistic. Despite over a decade of work with standards and assessments, reading achievement has only slightly improved; the achievement gap between majority and minority students persists. The problem with the logic of standards-based reform is that none of the seemingly simple tasks—setting standards, teaching students, assessing students, and making corrections—is simple. Deciding what children should know and be able to do is a values-fraught enterprise that almost certainly involves political conflict and compromise. The task of writing standards requires prioritizing goals, and there are many stakeholders with somewhat different priorities: parents, professional organizations, businesspeople, policymakers, and so forth.

A second problem is the development of assessments. Valid and reliable standards-based assessments are difficult and expensive to develop. Many educators prefer authentic performance-based assessments; others argue that such assessments are too costly in time and money and that group standardized multiple-choice tests are adequate for the purposes of standards-based reform. Another assessment issue is whether states have the capacity to implement yearly assessment programs. Recent errors in scoring and the inability of some test companies to provide results in a timely manner suggest otherwise. Finally, making corrections when assessments indicate that standards are not being met is complex; rarely do the assessments provide adequate information for identifying student difficulties and addressing them through instruction. Also, there is little in current standards and assessments to guide the necessary instructional changes. Until recently, reformers initiated reforms that lacked attention to the quality of instruction.

Fortunately, there is now a strong consensus that teachers and instruction are crucial to successful reform, and the quality of teacher preparation and professional-development programs is now in the spotlight. Earlier reform models that presumed a simple causal relationship of content standards to assessment to improved achievement have been replaced by more complex conceptualizations of curriculum and instruction that include roles for professional development and standards for teacher licensure and for teacher-education accreditation.

Sources of Teacher Standards

To ensure that teacher standards are valid, we must consider all possible knowledge sources, including (a) professional consensus, (b) student standards, (c) instructional research on best practices, and (d) research on teaching preparation and accreditation and achievement.

Professional Consensus

Historically, the field has relied on consensus processes to develop standards. The International Reading Association (IRA), the National Council for Accreditation of Teacher Education (NCATE), and the National Board for Professional Teaching Standards (NBPTS) are just a few of the organizations that produce standards for teaching reading. The problem with the consensus method is that it only works when there is truly a consensus; and the plethora of published standards suggests that is a rare occurrence.

Aligning Teacher and Student Standards

Aligning teacher standards with student standards can improve student achievement. For example, one study found that mathematics teachers who participated in professional development targeted to a mathematics curriculum reform initiative changed their instruction to reflect the reform initiative. Subsequently, students scored higher on a mathematics test derived from the reformed curriculum. Note, however, that teacher standards derived from consensus-developed student standards reflect the input of conflicting stakeholders and may be difficult to interpret as a result.

Best-Practices Research

A third source for developing teacher standards has emerged from the work on effective practices. Drawing on the findings of the National Reading Panel with respect to effective practices for teaching reading, Reading First of the No Child Left Behind Act mandates that states receiving Reading First funds must offer teachers professional development and technical assistance grounded in scientifically

based research that includes five essential components: (a) phonemic awareness, (b) phonics, (c) fluency, (d) vocabulary, and (e) comprehension. The law also mandates a state review of teacher-preparation programs to determine whether they are grounded in scientifically based reading research and include appropriate instruction in the aforementioned components. The problem with using best-practices research is that the identified components are not exhaustive and thus not sufficient for delivering optimal reading instruction or defining teachers' knowledge base.

Grounding Teacher Standards

Ideally, we would also develop teacher standards from research on teacher licensure and education accreditation. To be useful, findings from this line of research need to show that teachers who possess a certain body of knowledge (what teachers know) and who demonstrate the use of best practices (what teachers should be able to do) actually do promote achievement. However, there is little research that supports this relationship. Further, few studies specify the type of knowledge represented by proxy variables (e.g., major in content area) or connect teacher preparation and accreditation to reading achievement.

However, the IRA's National Commission on Excellence in Elementary Teacher Preparation is conducting one promising effort in this area. The study examines the relationship between teachers' preparation for reading instruction and their students' reading achievement. Researchers followed beginning reading teachers from eight reading-teacher-preparation programs through their first 3 years of teaching and in the 3rd year collected reading achievement data from the teachers' students. Teachers from general teacher-preparation programs were used for comparison. Comparison teachers were also recruited from the schools where the reading-teacher-preparation program teachers were teaching. Results show differences between program teachers and comparison teachers in knowledge and classroom practices. For example, program teachers talked differently about their students' reading progress. Rather than using general terms (i.e., "they're doing great"), program teachers used the vocabulary of reading instruction (e.g., "I have one group that still has 'decoding problems'"). The program teachers' classrooms also contained more print materials, and the children and teachers had a deeper understanding of how to use the texts in their classrooms.

Teacher Preparation Models

Creating effective teacher standards and advancing the field requires a research program that identifies crucial teacher knowledge and practices in reading and then systematically tests whether teachers with that knowledge produce better reading achievement in controlled experiments, quasi-experiments, and planned variation studies. Formulating, implementing, and interpreting a basic research agenda for teacher education that has the potential to guide standards-based reform will take time, money, and a commitment from the teacher-education community. Unfortunately, there is no time, little money, and division within the teacher-education community regarding the best way to proceed. The most promising option is to identify multiple models for teacher preparation that show evidence of effectiveness, conduct a planned variation study to identify the program features that influence teacher education and student achievement, and initiate reform efforts based on the findings.

Examples of models of teacher preparation that might be explored through a planned variation study include (a) a standards model, (b) a 5th-year postbaccalaureate model, (c) a 4-year baccalaureate/clinical model, (d) an academic model, (e) a professional-development model, and (f) an alternative certification model. Space considerations prevent detailed discussion of these models, but it should be noted that they are not mutually exclusive. In fact, the model overlap is exactly what makes a planned variation model for research more appropriate than a traditional experimental-design study that would look for the "best" program. A planned variation study would identify the program features across models that are related to teacher education and achievement.

Conclusion

We have argued that research is the best potential source of teacher standards. Researchers must invest in a research program that will inform the quest for reliable standards for reading teachers and lead to improved reading achievement. We have cautioned against a quick rush into reform of teacher education without a careful exploration of the validity of the standards used in reform. Developing standards from a research program that identifies multiple models of effective teacher-preparation programs and revising reforms to reflect the characteristics of effective teacher programs are the most promising options for linking teacher education with reading achievement. A research and reform effort such as this encourages dialogue, values divergent views, and highlights the salient aspects of the relationship between teacher quality and student achievement. ⌘

Establishing the Basis for Improved Reading Achievement

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Although a few children appear to learn to read without instruction, for most children, reading is an acquired skill involving considerable time and effort. Pre-K/kindergarten literacy experiences provide the foundation for beginning reading and writing. An effective foundation includes daily access to books and other print materials; play opportunities linked to literacy; and instruction that supports a wide range of skill development, including knowledge of letters and their sounds, phonemic awareness, listening-comprehension strategies, and many other skills. To be an effective reading teacher for these students—to match appropriate instruction to individual children's competence—requires that teachers have knowledge of word and sentence structure, of lexical development, and of how these components combine to support conventional reading. Therefore, teachers need to understand specific skills related to reading as well as possess more general knowledge of the language systems that underlie reading.

Knowledge of how to provide maximum support for children's early literacy development may not be widespread among pre-K/kindergarten teachers. Recent literature reviews document teachers' lack of knowledge of how literacy skills emerge in preschool-aged children. In fact, a variety of perspectives can exist at the practitioner level. For example, some pre-K teachers believe that these children are "not ready" to receive literacy skills instruction, thereby ignoring valuable opportunities for teaching and learning. Some kindergarten teachers believe that creating a formal academic environment that incorporates phonics lessons, assigned writing tasks, and drill is the only way to advance literacy skills. Children are expected to function within a standard curriculum that may fail to acknowledge or address their individual differences. Neither of these approaches offers optimal benefits for children.

In considering the competencies teachers need to effectively support the literacy development of pre-K/kindergarten children, two questions emerge from the literature: (a) what knowledge do teachers need to implement best practices for teaching reading? and (b) what knowledge do administrators and supervisors need to ensure that professional-development opportunities support teachers' understanding and implementation of best practices?

Knowledge and Skills for Teaching Pre-K/Kindergarten Children

Effective school systems identify child outcomes or standards for students (e.g., recognizing letters and their sounds for pre-K/kindergarten children). Teachers must also be prepared to examine and critique the child outcomes used in their school and to understand how they are related to the instruction they provide in the classroom. Administrators and supervisors should ensure that all teachers have access to and responsibility for instructing children using child outcomes grounded in current research and theory. Professional-development opportunities should be aligned with such outcomes/standards.

To use child outcomes or standards effectively for instruction, teachers need to understand pre-K/kindergarten children's literacy development and reading in particular. Effective teachers must know and be able to teach young children the characteristics and uses of language and literacy (e.g., how print functions, that written language has certain characteristics). Additionally, children need multiple opportunities to produce personally meaningful writing (e.g., journal writing, scaffolded writing); develop their sensitivity to the individual sounds in words; explore books; and become more proficient oral language users. Effective teachers of pre-K/kindergarten children must possess knowledge of language systems and reading processes in order to support literacy development. This content knowledge is a necessary (but by itself insufficient) component of successful child outcomes.

In addition, pre-K/kindergarten teachers must understand the underlying cognitive proficiencies that make literacy possible and that children's play advances those proficiencies. Access to high-quality play is essential to the development of literacy in young children. According to one 1996 study, play is the foundation for three major developmental accomplishments at this age: (a) imagination, which supports children's development of complex ideas; (b) symbolic functioning, in which children mentally use objects, actions, words, and people to represent something else, preparing the way for more conventional literacy; and (c) the integration of emotions and thinking, in which children's behavior is no longer simply reactive, but includes memory of and reflection upon experiences and ideas.

Kindergarten teachers must be capable of developing a variety of practices to support literacy. These include monitoring, facilitating, interacting, inquiring, extending play, engaging in discussion, and decision making. Many of these capabilities are not realized by the end of a preservice program, and only sustained inservice professional development combined with reflection on teaching experiences can solidify these skills. To be effective in supporting children's early literacy, teach-

ers need professional-development opportunities that encourage examination and reflection on their own practice. One example of such an activity involves teachers' reflection on their use of the pedagogical technique scaffolding, a research-based procedure found to be effective for pre-K/kindergarten-age children, to develop children's writing. Using scaffolding, teachers guide children as they learn to write a message that has meaning and consequence for the child. The language and literacy knowledge students apply in enacting this instructional strategy include phonological awareness (rhyming, blending, segmenting), print awareness, and alphabetic knowledge. After learning the technique and using it with students, teachers assess and analyze children's behaviors and then share their methods and findings with other teachers in the professional-development course. Teachers examine the trends in their findings and identify what those trends suggest about the efficacy of the instruction and how it could be modified to enhance its effectiveness with different children. Most important in light of professional development, teachers learn about the language system (phonological, syntactic, semantic, and pragmatic development) through active engagement and reflection on practice with their students and collaboration with adult teachers, whether they are preservice teachers and university faculty or colleague/mentor teachers in a community of learners.

A Lifelong Learning Process

To support literacy development in pre-K/kindergarten children, teacher knowledge of language systems, reading, and instruction should be developmental in scope; professional-development activities should reflect this developmental orientation. Teachers at different career and skill levels (e.g., preservice, beginning teacher, experienced teacher, and master teacher) have varying needs. Accordingly, professional-development opportunities should be designed to support the particular needs of teachers at each level, as well as their general needs at all levels.

For example, beginning teachers—armed with their preservice research-based knowledge and practicum experiences—quickly learn that their preservice training cannot completely prepare them for all aspects of teaching pre-K/kindergarten children. Consequently, beginning teachers need ongoing support in the form of mentoring, instructional leadership, and effective professional-development experiences. In particular, beginning teachers need the opportunity both to "unload" some of the stresses associated with teaching and to build their capacity to plan and implement effective instruction. Beginning teachers also need assistance to address the variety of backgrounds and skills that their children bring to school. Teachers at this level should be capable of implementing diverse practices to support literacy, while continuing to develop their understanding of language systems, reading, and instructional methods.

In contrast, experienced teachers need support to consolidate their current practices as well as to incorporate new knowledge. Experienced teachers need and deserve opportunities to reflect upon their practices and to receive support from others at critical periods. At the master-teacher level, mentoring beginning teachers is a particularly useful form of professional development. As mentors, master teachers can articulate their knowledge of content and instructional practices. They also develop the skills needed to carefully observe other teachers and to provide feedback and suggestions that are of immediate benefit to the mentee.

Conclusion

Pre-K/kindergarten children need environments that provide appropriate levels of support for their emerging literacy skills. Children need teachers who plan and implement instruction so that standards are met. Equally important, children need instruction that builds upon their prior knowledge and that cultivates a life-long motivation to learn. Literacy instruction must include a wide range of skill-development opportunities for children, including rich conceptual experiences that promote vocabulary learning; development of listening-comprehension skills; and sensitivity to the sounds of language. Kindergarten teachers should also be able to recognize potential reading difficulties. Moreover, young learners must be nurtured so that literacy experiences are enjoyable and personally meaningful. As new teachers discover, effective instruction takes time; both group-management issues and individual children's strengths and needs must be considered. Effective instruction requires the knowledgeable integration and application of research-based principles, standards, and instructional methods and techniques. Given the complexity of pre-K/kindergarten children's literacy development, professional-development opportunities should be designed to promote effective age-appropriate practices, focusing on what is known about early literacy and about how teachers, administrators, and supervisors can best support children's development. In addition, professional development ought to encourage teachers to enact, assess, analyze, and reflect upon the principles and practices they use. ⌘

Professional Development for K–3 Teachers

Content and Process

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How can we best prepare primary-grade teachers so that they will have the knowledge, skills, and confidence that will enable them to help their students meet the high literacy standards required by our society? It is critical that professional development assist teachers in developing up-to-date, research-based knowledge about the reading process, about how children learn to read, and about beginning reading instruction. In this *LSS Review* article, we outline the essential content of a program of professional development for primary-grade teachers as well as the process of how best to involve teachers in programs of professional development. Within this discussion we consider the importance of teachers being able to evaluate the instruction and practice materials provided by the published programs of reading instruction often referred to as core or basal reading programs.

Professional Development for K–3 Teachers: The Content

To be effective reading teachers, K–3 teachers need knowledge of the theory and practice of reading instruction, classroom organization, and assessment. Professional-development activities should be designed accordingly.

Theory and Practice

Foundational to a professional development program for teachers is in-depth knowledge of reading process research and of how children learn to read. Teachers need to know about research-based instructional practices that effectively and efficiently support student learning. Teachers also need to know how to look for the sequence of instruction in the core reading programs they use in their classrooms, as well as how to evaluate the quality of instruction and practice presented in the programs.

Additionally, professional development needs to focus on the five components of reading instruction: phonemic awareness, phonics, fluency, vocabulary, and comprehension. Phonemic-awareness instruction develops children's ability to recognize, think about, and work with the individual sounds in spoken words. Phonics instruction teaches students the relationships between the letters of written language and the individual sounds of spoken language. Fluency practice improves students' ability to read a text accurately and quickly. Vocabulary instruction involves assisting students in learning the words, both spoken and written, that they must know to communicate effectively and to understand what they read. Comprehension instruction involves helping students understand the meaning of the stories and other texts they read in and out of school.

Professional development can help teachers incorporate these five components of reading instruction into a framework that guides their instructional decisions about what to teach, when, and how. This framework can help teachers as they select and evaluate activities in their basal reading programs. The instructional framework can also be used to assist teachers as they incorporate other important aspects of reading instruction into their reading programs, such as wide reading to promote vocabulary development.

Classroom Organization

Knowledge about how to schedule and organize classroom instruction is essential. Our own experiences suggest that teachers' knowledge of research-based reading instruction cannot be used effectively if they do not learn how to set up their classrooms appropriately. The tasks of organizing a classroom and scheduling instructional events often stymie teachers, sometimes so much that the important knowledge they have about how to instruct their students remains unused.

For professional development to be effective, teachers need assistance and support as they develop new organizational structures and routines in their classrooms. Professional development activities should help teachers develop these routines and restructure their classrooms for more effective instructional practices. For example, teachers need assistance when they decide to reorganize their classrooms so that their students spend more time working on fluency. They need support in deciding when and where fluency practice will take place.

Assessment

Research indicates that assessment is a critical element of reading instruction, especially at the lower grade levels. Teachers often exit their undergraduate education programs with insufficient knowledge about the assessment and instructional cycle and how to use that cycle to move students through the instructional program. As a result, teachers may use their core reading programs inefficiently, teaching all students all lessons without an awareness of which students already know what they are being taught and which students need more explicit instruction and/or more practice.

Because preventing reading difficulties requires the wise and efficient use of informal assessments, professional development needs to assist teachers in learning how to use the informal assessments in their core reading programs. These assessments provide teachers with ongoing feedback about which students are making adequate progress and which students require immediate attention and help before they fall behind.

(K–3 Teachers, continued on p. 23)

What Expert Teachers in the Intermediate Grades Need to Know and Be Able to Do in the Teaching of Literacy

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As students move from the primary grades into the intermediate grades of later elementary school, mounting concerns over high-stakes testing and the need to "cover everything" sometimes lead to classrooms that are less personal and more curriculum-driven. However, in the most effective, well-managed classrooms, a strong sense of community and a high regard for doing, knowing, and learning prevail. Mutual respect, shared responsibility, and pride of belonging are readily apparent in these classrooms. Students understand what is expected of them and feel empowered and supported to confront challenges. Teachers know that to provide the kind of high-quality content and instruction that will enable all students to achieve they must understand their students and their specific needs and plan responsive instruction, particularly in reading.

To plan responsive reading instruction, differences in reading preferences and behaviors among students must be addressed. As students progress through intermediate grades three through six, individual differences become more pronounced. Teachers who are familiar with the diverse range of reading abilities and interests in their classrooms respond by tailoring materials and instruction to fit individual student needs and ensuring their classroom libraries include a variety of texts.

Children in the intermediate grades are excited by new ideas and learning. They are motivated by choice and like having a voice in their education. Teachers who are sensitive to these characteristics include students in problem solving and goal setting; they allow them to choose instructional activities and materials; and, when possible, they seek students' input in such matters as designing rubrics (written descriptions of performance expectations) to evaluate assignments.

Interacting with peers is also important to intermediate-grade students. Wise teachers transform social needs into worthwhile instruction by planning activities that involve working with peers, such as collaborative projects and small-group discussions. When carefully planned and appropriate, activities like these can increase motivation and learning as well as foster positive peer relations.

Content and Instruction

Sophisticated readers employ many strategies to comprehend what they read. They rely on prior knowledge and prediction to make connections and set purposes before they read, they reread and think strategically while reading to maintain meaning, and they apply graphic organizers and note-taking tools to refer back to the text after reading. Most students in the intermediate grades require instruction to develop and gain control over strategic knowledge for comprehension as well as to enhance their word knowledge and oral reading fluency.

Teaching comprehension entails more than assigning work and asking questions. To effectively teach comprehension strategies, in addition to being knowledgeable about their students, teachers must be familiar with a large and varied body of age- and skill-level-appropriate literature so they can teach and recommend texts to their students while applying scaffolding techniques to reading instruction. Carefully scaffolded instruction moves from explanation to demonstration, then to guided practice, and finally to opportunities for students to independently apply what they have learned through silent reading of self-selected and assigned texts. This type of explicit teaching is critical beyond the primary grades, as comprehension of narrative and expository text takes on an increasingly significant role across subject content areas. Teachers must also be aware of their own strategic reading and thinking and be able to demonstrate these strategies for their students.

Teachers who effectively use explanation and direct instruction, demonstration, guided practice, and independent application approaches acquire this ability through professional development that includes professional reading and discussion (e.g., study groups) and workshops that feature a facilitator who demonstrates the techniques. Viewing videos of expert teachers using these techniques can also help teachers improve their reading instruction.

Assessment

Understanding Learners

To provide students with appropriate yet challenging books and instruction, teachers need to understand their students as individuals and as learners, capitalizing on their interests to foster motivation and confidence. In addition to data that may be available from district, state, or national testing, teachers in the intermediate grades need to be familiar with informal measures and methods that can supply them with ongoing information about their students. Such measures include interest inventories, reading surveys, peer interviews, conversations about reading preferences, and autobiography writing. Other methods include having students write end-of-the-year letters to their next year's teacher describing their strengths, weaknesses, and interests. Parents can also write letters about their child. Whatever the means, it is critical for teachers to discover their students' interests and incorporate them into their instruction.

Teachers should also learn about the specific reading behaviors of their students and estimate students' reading levels. Running records and

informal reading inventories (IRIs) are particularly useful; however, both require practice for teachers to use them competently. Teachers can also gain valuable insights about their students' comprehension, fluency, and pattern/sound knowledge from measures like written or oral retellings, checklists, and spelling inventories.

Evaluating Performance

Student performance can be evaluated in various ways, including through the use of alternatives to the traditional paper and pencil test. When using the latter approach, teachers should be sure that they are testing what they have taught and that students know how to respond to the questions being asked. For example, if students are expected to demonstrate their understanding of informational and narrative text through multiple-choice and open-ended responses they need to be taught how to approach these tasks.

Alternative assessments include teacher observations, rubrics, and student self-evaluations. Observing students at work in varying instructional formats is an essential component of the assessment process for intermediate-grade teachers. Observations provide teachers with ongoing information about student performance. As a result, teachers can help children work through their difficulties with particular content or procedures as they arise, rather than when the test is given. Moreover, observation notes can be used to inform future instruction.

Teachers also need to know how to design and use rubrics for assessing projects, oral and written reading responses, fluency, and other reading-related tasks. Rubrics allow teachers to evaluate student performance objectively and consistently. Rubrics can also inform students of teacher expectations and help them to recognize strengths and weaknesses in their products. Students in the intermediate grades can also be taught to reflect on their progress over time, such as with response writing, and be helped to identify areas for improvement.

Teachers must learn to use the assessment data they gather to plan and improve instruction. Action research that includes follow-up assessment can help teachers to determine the effectiveness of the instructional change.

Classroom Management

In most intermediate-grade classrooms, time for teaching and practicing reading is limited. Successful teachers maximize student learning by being well-prepared managers of time, materials, and student behavior. They establish classroom routines (e.g., posting schedules and using organization tools like work boards and labeled baskets or folders to file completed work) and monitor their effectiveness, making changes as necessary.

In addition to establishing classroom routines and procedures that encourage responsible student behavior, it is critical for intermediate-grade teachers to carefully plan interesting and meaningful reading work for varied instructional formats, including small-group instruction. When the teacher meets with a small group while the rest of the class works independently or in small teams, students working without the teacher need tasks that are appropriately challenging and absorbing. Response writing, purposeful rereading, and hands-on word study are examples of activities that can engage and maintain student interest. If a cooperative learning structure is used, all students must have clearly defined roles to ensure accountability for everyone. Because students work at different paces, teachers need to plan and explain alternative assignments (e.g., reading a self-selected book) that students can work on independently once other tasks are completed.

Students in the intermediate grades respond to teachers' expectations of their behavior when the expectations are clearly articulated and respectful of students' need to have a voice in classroom procedures. Setting procedures for moving about the classroom to sharpen a pencil, to collect or return materials needed for class work, or to join or leave a small group, is helpful to the long-term maintenance of student behavior. Thus, learning how to manage a classroom effectively is an important part of new-teacher professional development. Teacher colleagues who work as mentors to direct and encourage new-teacher professional development should approach classroom management proactively. Resources such as descriptions of exemplary classroom practices are helpful, but the most effective professional development in these situations may be classroom observations of teachers whose management systems are exemplary. Observations may be followed by conversations with colleagues and/or supervisors to determine specific goals for changing current practice and for setting standards to determine whether the goals have been met. If onsite classroom observations are difficult or uncomfortable to arrange, teachers can review videotapes of effectively managed classrooms.

Conclusion

Teachers who create and manage effective classrooms for intermediate-grade students attend to myriad details. In addition to organizing the environment in which students will learn, they plan the content of their instruction and the ways they will deliver it, and they assess their students' learning. Some teachers begin their careers knowing how to orchestrate classrooms that function effectively for their students. Most teachers, however, require experience and professional development throughout their years of teaching to develop and maintain the knowledge and sensitivity required of exemplary teachers. ⌘

Salient Content for the Professional Development of Reading Educators at the Middle- and High-School Levels

Donna E. Alvermann, University of Georgia; and Allison Nealy, Clarke Middle School (GA)

Teachers know from experience that all readers struggle at some point, with certain texts, in certain contexts. Adolescents with a history of reading difficulties present particular challenges to content area teachers. Because they read so infrequently, these youth typically do not acquire the requisite background knowledge and specialized vocabulary needed for comprehending most school science texts. Consequently, teachers sometimes expect less of these students in exchange for the students' goodwill and reasonable effort in completing content area assignments that typically require little, if any, reading.

"Best Practice" and Adolescent Multiliteracies

Professional-development experts do not always agree on what constitutes "best practice" in teaching content area literacy. A growing number of literacy educators and researchers are critical of a one-size-fits-all model of teaching reading, particularly individuals whose work is focused on reconceptualizing the multiple literacies in adolescents' lives. These scholars are beginning to understand why some students' literacy development is every bit as dependent upon access to certain socioeconomic and cultural resources as it is upon skills instruction. They are also giving credence to the multiple literacies adolescents use outside of school.

At the high-school level, particularly, there is considerable debate over what counts (or should count) as literate behavior: school literacy, with its emphasis on printed texts, or the multiliteracies youth use everyday outside of school (e.g., web surfing, e-mailing, instant messaging). Scholars question the common assumption that school literacy is superior to visual, digital, or symbolic literacy, particularly because the research indicates that literacy is on the verge of reinventing itself. Indeed, some scholars have characterized the current era as "New Times," a time of major global shifts in cultural practices, economic systems, and social institutions facilitated by new information communication technologies and the complex multiliteracies these technologies entail. Rapid changes in "texts and literate practices" prompt literacy educators worldwide to speculate about the ways in which new technologies will alter people's conceptions of reading and writing. Literacy in New Times will require the services of new kinds of reading specialists who recognize the multiliteracies of adolescents and incorporate these multiliteracies into programs and services in middle and high schools.

Collaboration

This type of change is evident in the schools of some educators. Programs and services can change to meet the needs of adolescents living in New Times. In some middle schools, adolescents also collaborate as they learn to take responsibility for their own learning in participatory classrooms. The participatory approach to literacy instruction is no less concerned with content mastery than the more traditional teacher-centered transmission approach; however, rather than emphasizing the teacher's role in transmitting facts and concepts (often through lecturing), the participatory approach supports adolescents' academic literacy development by incorporating classroom structures that promote peer interaction (e.g., peer-led literature discussion groups, reading and writing workshops) and interactions with a more knowledgeable other (e.g., scaffolded instruction).

Although the transmission model is often criticized for emphasizing subject-matter coverage over more participatory activities for engaging adolescents in learning academic content, the model is widely used at the high-school level (and to a lesser extent at the middle-school level). One frequently cited justification for its use is the need to address external pressures, such as accountability in meeting curriculum standards and preparing students for statewide assessments. Additionally, pressures within the classroom to maintain order, regulate socialization patterns, and meet the constraints of time and resource availability also contribute to the transmission model's longstanding use among content area teachers. In transmission classrooms, texts (like teachers) are viewed as dispensers of knowledge; in participatory classrooms, students use texts as tools for learning and constructing new knowledge.

However, in actual classroom practice, teaching approaches that seem contradictory on the surface often support one another. For example, in a literature review on contexts for literacy in middle and high school, teachers' knowledge and beliefs about the goals that should drive literacy instruction, the availability of resources, and classroom-participation structures influenced how a particular approach was used. Thus, peer-led literature discussions enacted in one context did not necessarily resemble the same approach used in a different context. This has relevance for professional-development purposes inasmuch as it would be inappropriate to assume that mandating so-called "best practices" would work or look the same in different school and classroom contexts. Also, mandating best practices would not work for some teachers who are accustomed to thinking through decisions they make about their own teaching, particularly when trying to balance

(**Salient**, continued on p. 24)

Building Capacity for the Responsive Teaching of Reading

Strategic Inquiry Designs for Middle- and High-School Teachers

Cynthia L. Greenleaf and Ruth Schoenbach, Strategic Literacy Initiative, WestEd

For students to continue developing as readers beyond the early grades, they need plentiful opportunities to read and to learn strategic approaches to reading with the support and guidance of knowledgeable teachers. Yet little comprehension instruction actually occurs in intermediate or secondary classrooms. Many middle-school and high-school teachers believe they cannot help students with reading because they are not reading specialists. Few of these teachers see their own ability to read subject-area texts as a powerful resource for helping students comprehend what they read.

This article briefly describes the Strategic Literacy Initiative's (SLI) professional-development approach. This approach uses an integrated set of inquiry tools designed to help teachers support students' engagement and achievement in reading academic texts. The article then offers a snapshot of one of the inquiry tools and closes with a brief note on accumulating evidence that this professional-development approach initiates powerful improvements in teaching practice resulting in literacy-learning gains for students.

Building Teachers' Capacity to Make Effective Use of Comprehension Strategy Instruction Through Metacognitive Conversations

There is ample evidence, given the long history of reading comprehension research, that students benefit from explicit instruction in comprehension. Yet evidence is also accumulating that the social environment of the classroom, i.e., whether and to what extent teachers and students collaborate on comprehending course texts, rather than the type of comprehension-strategy instruction students are given, per se, mediates students' engagement with text and subsequent strategy use. Our work with teachers aims at helping them develop collaborative, classroom environments in which metacognitive conversations about reading experiences can become routine, and in which students have extensive opportunities to read with the support of the teacher and their peers. In such classrooms, instructional techniques for explicitly teaching comprehension strategies that develop students' conceptions and approaches to reading become valuable tools for teachers and students.

Making the Invisible Visible

On the basis of a growing understanding of teaching as a complex, interactive thinking and decision-making process, educators have begun to recognize the importance of teachers' abilities to understand the thinking and learning processes of their students. To be effective, teachers must have the capacity to listen to and interpret student thinking and learning processes. Teachers will be best able to help students by making the "invisible" reasoning processes, strategies, and discourse rules that shape successful readers' and writers' work explicit, "visible," and accessible to the classroom community.

To help all students succeed with academic tasks, teachers must be able to help students from diverse backgrounds build from the familiar to the unfamiliar, from the known boundaries of their culturally shaped, everyday lives to the unknown terrain of broader academic and scientific and civic participation. To develop a rich repertoire of classroom practice, teachers need access to experientially rich demonstrations of specific teaching approaches and opportunities to make connections between these approaches and their own teaching goals and approaches. Teachers also need encouragement to take risks and experiment in the classroom. In professional-development sessions, teachers practice the actual thinking and interpretive work and instructional decision making they must do in the classroom. Over time, teachers develop knowledge about reading and student learning that is deeply grounded in experience that can be drawn upon as they teach.

Building Teachers' Generative Knowledge of Reading

Imagine this scenario: A diverse group of urban middle- and high-school content area teachers gather around conference tables in interdisciplinary school teams, silently reading the first two paragraphs of "Father's Butterflies" by Vladimir Nabokov. This fictional memoir of a Russian childhood steeped in the study and classification of butterflies presents English-speaking readers with particular challenges. Liberally sprinkled with Latin genera and species names as well as French, German, and Russian expressions, it demands that the reader engage any and all word and language-analysis skills at his or her disposal. Moreover, Nabokov's densely layered sentences with their embedded parenthetical remarks and dependent clauses challenge the prose-reading fluency and sentence-processing capacity of almost all English readers. The topic lepidopterology (the study of butterflies), though familiar to some, is usually obscure enough to most of the teachers in the room to present them with background knowledge and conceptual challenges.

Teachers are asked what comprehension strategies they used to make sense of "Father's Butterflies," what comprehension problems they

encountered, and what comprehension problems remain. The professional-development facilitator models the kind of inquiry conversations teachers are asked to try out in their varied subject-area classes. These conversations are aimed at getting readers to share what they did to make sense of "Father's Butterflies," why they were motivated to do so, how they carried these various strategies out, and the results of their strategic actions. Rather than conducting a call-and-response conversation, with responses like "I reread" left unexplored, the facilitator probes, and then teachers practice probing each other in small-group conversations that reveal the complexities of processes and knowledge varied readers bring to texts. "How did you know this was a memoir? What were the cues? How come I didn't see that?" or "As a science teacher, did you find this easy to understand? You mean you really struggled as much as I did? Why?" Frequently, problems of motivation and engagement emerge: Teachers will confess that they were tempted to put the text aside because they were not interested in it or because they found Nabokov's tone insulting. Almost always, a brave soul will reveal that he feared that his own lack of reading proficiency or knowledge would be exposed in front of his colleagues. Many heads will nod. The parallels to student reading experiences in school become a felt presence in the room.

Engaging teachers in collaborative inquiries into their own reading processes with challenging texts helps them become more aware of the literacy proficiencies they bring to reading challenges. Teachers can draw on these proficiencies to model their own strategic approaches to texts for their students, identify the reading strategies they see students using, and facilitate students' acquisition of the strategies.

Developing Teachers' Insight Into Student Learning

In diverse urban classrooms where teachers work with students from multiple cultural, linguistic, and socioeconomic backgrounds, teachers need to be able to respond in supportive and productive ways to students' diverse conceptions of reading, subject matter, and learning. To address this need, teachers participate in collaborative inquiries through protocols involving a set of literacy-learning cases, video- and text-based "close-ups" of ninth-grade students trying to make sense of various texts such as magazine articles about popular sports or music figures that students have chosen for recreational reading. The students talk about their reading histories and habits and explain their thinking and reading processes.

The literacy-learning case inquiries are intended to slow down, inform, and often interrupt teachers' automatic processes of evaluating students and making judgments about their capabilities with little consideration of the strengths and resources students bring to classrooms or the difficulties complex texts pose for student comprehension.

The literacy-learning cases challenge teachers to recognize the strengths students bring to their recreational reading of expository text and to build on these strengths to help students understand school texts. Across the cases, teachers see that students vary their approaches to reading different texts and that reading is shaped by situational factors. In all of the literacy-learning cases, diverse urban students share insights into their thinking and reading processes. Teachers almost uniformly find this metacognitive talk intriguing; many are surprised by the ninth-grade students' capacity to be reflective. This leads many teachers to look for more opportunities to tap into this potential resource in their own classrooms.

Effectiveness

In a multiyear study of 29 middle- and high-school subject-area teachers who participated in an SLI professional-development network, we examined the impact on participating teachers' knowledge growth and change in classroom practice and on their students' reading comprehension and engagement.

The findings indicate positive changes in teachers' conceptions of reading, of their role as subject-area teachers, and of students' literate capacities. In addition, the study provides promising evidence that teachers who have participated in the kinds of generative professional development described above change their classroom practices in ways that support students' increased opportunities to practice "breaking the codes" of academic texts. The companion study of students in these teachers' classrooms demonstrated that, as a group, these students gained substantially more than a year's expected growth on a standardized measure of reading comprehension. In addition, and equally important, these students came to see reading as an active and strategic process. ⌘

Re-Engaging Struggling Young Readers and Writers by Means of Innovative Professional Development

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The Teachers' Learning Collaborative (TLC) was organized in 1996 as part of the Center for the Improvement of Early Reading Achievement (CIERA) study of reengaging low-achieving third-grade readers by means of innovative professional development. The members of TLC were teachers who varied in grade levels taught, number of years in practice, and communities in which they lived and worked. The students TLC members taught were from various social, economic, linguistic, and ethnic backgrounds. We report briefly on TLC activities and research below.

Theoretical Framework

We envisioned TLC within a theoretical framework drawn primarily from activity theory and based on what we had learned in earlier studies of conversation and learning. We introduced a recurring cycle of activities drawing on earlier empirical research on book clubs. In these clubs, the private activity of reading/writing and the public activity of dialogue among peers work together to support engagement, time on task, and comprehension. We hoped to reengage students by motivating their participation and interest and scaffolding their engagement in authentic and challenging literacy, both individually and in small-group and whole-class peer-led literacy activities. Further, we hoped to learn to do this by trying it ourselves.

Framing a Problem of Practice

Fostering engagement is crucial to helping the struggling reader. These students, already falling behind their same-age peers in literacy competencies, have little hope for success in school and beyond without immediate and meaningful intervention, since achievement gaps in the early grades only widen over time. Instructional practices must be structured such that struggling students have increased opportunities to learn and practice challenging, powerful literacy.

To begin our exploration of what all readers need to succeed in a regular education classroom, we needed to understand and analyze what readers do and what challenges readers face, as well as the specific needs of diverse students. While we, as adults, self-identified as successful readers, we recognized we usually read silently, did not discuss what we read, and were inexperienced in reading and learning within a learning community. We were also inexperienced in reading and discussing texts that were not of our own choosing and perhaps not within the sphere of our own background knowledge and experiences. For these reasons, TLC members participated in reading and study groups. We read adult autobiographical literature, maintained reading logs to record our responses to the texts we read, and discussed the texts in groups of peers. We then analyzed our experience in terms of impact on ourselves; literacy as a social, cultural, and cognitive process; and what we could draw from our experiences to create a literacy-instructional curriculum that would reengage struggling readers and provide new and exciting challenges for those already engaged.

From our experiences in the study groups, we designed the Book Club Plus curriculum framework (Book Club and Literacy Block). We wanted to address the problem of practice that left most struggling readers without opportunity to interact around the books and related themes and issues appropriate to their grade level by engaging students in peer-led book discussions and targeted, guided reading instruction with reading-level-appropriate materials. In addition to the framework, we needed an assessment system to inform teachers of students' progress over the course of the school year and content for the book clubs and the literacy block (1½ to 2½ hours in which various literacy contexts are addressed) that was thematically coherent and incorporated age-appropriate reading, writing, and speaking activities.

TLC teachers piloted the Book Club Plus curriculum across different districts (rural, suburban, and urban) and grade levels. Each TLC teacher also explored a specific research question as they piloted the curriculum framework. TLC teachers focused on aligning national, state, and district standards and benchmarks and developed "I Can" statements to serve as the benchmarks in the Book Club Plus units. The "I Can" statements were aligned with specific instruments we could use to chart students' progress (e.g., a checklist of observed literate practices keyed to district oral-language exit skills for a particular grade). They were also used to guide instruction over the course of the year and to frame the assessment program that was used to inform teachers, students, and parents of the students' progress.

Focus on Grade 3

Third grade is a transition year for many students. As textbooks are introduced for subject areas such as science and social studies, students are challenged to read for understanding beyond vocabulary development and fluency. Performance in third grade is also a concern because of what some have called a "slump" in fourth graders' standardized test scores. While not uniformly documented, there is some evidence that children who performed at grade level in earlier grades show diminished performance by the end of third and into fourth grade. With new challenges from texts and tasks, students can potentially become disengaged and less open to literacy learning.

While the TLC Network included teachers across grade levels, we limited our data collection to third-grade classrooms. Each third-grade class was paired with a control classroom within the same school. Where possible, classes were matched for characteristics such as percentage of free and reduced lunch, ethnic diversity, gender, and student needs. We examined student achievement resulting from their participation in Book Club Plus. We also compared students in each of the control classrooms, using the Metropolitan Achievement Tests. The students in the Book Club Plus classrooms performed equally well as those in the control classrooms. This finding is significant because the Book Club Plus students spent only half of their literacy instruction engaged in traditional activities these tests are designed to evaluate. The remaining time was spent participating in less often recommended activities related to student-led discussions and personal writing in response to reading. Additionally, in each of the classrooms, we used the Qualitative Reading Inventory with three students who were performing at the lowest levels in their classroom on a range of reading tasks. The teachers gathered information at the beginning and end of the year. Across classrooms, all the students made at least a year's growth during that academic year, but even more encouraging, more than half of the students made more than a year's growth and a few students even achieved grade-level performance.

We traced student engagement to teacher thought and action. Specifically, engagement is prompted and sustained in meaningful content and in a range of contexts inviting youngsters to participate with their texts and their peers through reading; in writing of different formats and purposes; and in talk within dyads, small groups, and whole-class settings. Within the Book Club part of Book Club Plus, students saw why they were being taught about literacy. Within the Literacy Block context, they understood that the skills and strategies they were learning would support their access to the books they wanted to read and the writing they wanted to create. In both contexts, students saw themselves as active members of and participants in a literate community.

Sharing What We Learned

TLC members shared what they learned helping their struggling readers to succeed with each other within the network community. TLC peer interactions helped build a common knowledge base that expanded as each person contributed his or her expertise to the group. TLC members also shared what they learned with teachers from other communities. They presented at district workshops and at local, state, and national conferences. We shared with our peers through articles in research-based journals and through articles and book chapters that various TLC subgroups wrote on struggling readers and on their own research inquiry.

Transforming Our Understandings of Literacy Instruction

Our project underscores two commitments literacy instructors must make to their students. First, teachers must ensure that all students are taught literacy using materials that are appropriate for their reading level. Here, the commitment is to accurately assess student progress and provide instruction designed to help students achieve at least a year's growth in a year's time. Second, children who are struggling readers need continuous opportunities to engage with texts that have been written for their age group, even if they cannot decode these texts independently. Here, the commitment is to provide access to these texts through listening centers, books on tape, buddy reading, and so forth, and to allow students to respond to and discuss these texts with same-age peers.

Book Club Plus is designed to accelerate the literacy learning of struggling readers as they receive high-quality literacy instruction, as well as meet the literacy needs of grade-level and above-grade-level readers. As a result of their experiences, students stopped self-identifying as failures in reading; students of all reading levels contributed to their group's text understanding and interpretation; and teachers had more opportunities to teach not only basic skills and strategies, but also those strategies important to comprehension and critical thinking. ⌘

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The Laboratory for Student Success (LSS) is one of the nation's ten regional educational laboratories that is funded by the Institute of Education Sciences (IES) of the U.S. Department of Education to revitalize and reform educational practices in the service of the educational success of the nation's children and youth.

The primary mission of LSS is to bring about lasting improvements in the learning of the Mid-Atlantic region's increasingly diverse student population. LSS seeks to establish a system of research, development, and dissemination that connects schools, parents, community agencies, professional groups, and higher education institutions and transforms low-performing schools into high-performing learning communities.

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Professional Development in the Uses of Technology

Elizabeth S. Pang and Michael L. Kamil, Stanford University

Research on the initial and continuing education of literacy teachers has received considerable attention in recent years. However, the topic of technology and technology integration is a relatively new area of research in the professional development of reading educators. The pervasiveness of computer and communication technology has made it imperative for teachers, teacher educators, and researchers concerned with literacy instruction to examine critically its impact on teaching and learning.

Computer technology has considerably widened the scope of technology use in educational contexts and opened up new possibilities and new or expanded conceptualizations of literacy (e.g., visual literacy). The use of traditional technologies—such as film, audio recordings, and video—to deliver or present information to students is not new to teacher education programs. However, the systematic study of such technologies, including more recent computer-based applications, with a view to prepare teachers to integrate technology in their classrooms and reading instruction, is a new focus.

To examine the trends in technology use and integration in literacy-teacher education, we reviewed studies of prospective and practicing teachers that utilized technology either as a research tool, as data, or as curriculum.

Research on Technology and Literacy-Teacher Education

We identified three main uses of technology in the literature. The most common use is to deliver content and model instructional methods. For instance, video recordings are often used to present instructional methods such as Directed Reading and Thinking Activities (DRTA). Video recordings are also used to model good teaching in authentic classroom settings. Additionally, researchers use video and audio data to study teachers at work in classrooms. For instance, video and audio recordings may be used to compare experienced and inexperienced teachers, study prospective teachers' perceptions, or to examine teachers' implementation of an instructional strategy. Technology is also used for communication-based distance learning via e-mail and hypermedia.

Video Technology

The use of audio-video recordings to enhance preservice reading-teacher education is widespread, and many studies reported favorable findings. In one study, the use of videotapes of exemplary teaching served as a catalyst for observation and reflection by preservice and inservice teachers. Video data is also useful for analyzing teachers' changing knowledge and practices.

Computer Technology

Computer technology allows the use of multimedia (or hypermedia), e-mail, and electronic discussion lists. Multimedia software enables digitized video images to be combined with sound and text. Hypermedia is sometimes used to refer to multimedia applications because of the use of hyperlinks or electronic pathways for connecting various forms of text, graphics, and media. Multimedia and hypermedia typically require software that enables on-demand or random access to video clips, audio data, text, et cetera. In one study, a multimedia program using short video clips within a hypermedia system that integrates many different types of media was found to be adaptable to the needs, interests, and capacities of student teachers, who varied in terms of their background and their purposes for using the program. However, the findings did not show whether preservice teachers had truly adopted new perspectives as a result of learning through multimedia tools or how those perspectives will guide their teaching and impact student learning.

The Internet and Communication-Based Technology

An important development in literacy-teacher education is the pervasiveness of communication-based computer technology and the explosive growth of the Internet. The Internet offers numerous possibilities for the delivery of video-based cases and hypermedia environments for both preservice and inservice teacher education. High-speed networks and faster computers make it possible to deliver multimedia content in teacher professional development. Despite these advances, computer technology in professional development does not have to depend heavily on multimedia, which requires considerable developmental effort and cost. E-mail is possibly the most explosive use of technology in communication.

Utilizing e-mail in literacy teacher education can offer teachers a supportive environment in which to discuss ideas about literacy instruction and to reflect on their teaching and learning experiences. Research has shown that teachers discuss issues that support their learning when communicating via e-mail in their preservice programs. Furthermore, a combination of face-to-face and computer-mediated communication enables teachers to construct knowledge about literacy. Research also shows that e-mail communication between novice and experienced teachers in the context of a reading-methods course can facilitate better understanding of different philosophies of reading. Using e-mail in teacher education can also connect teachers, especially those in preservice programs, with elementary-, middle-, and high-school students.

E-mail communication fosters reciprocal and trusting relationships between prospective teachers and the students.

Technology in Literacy Instruction

Computer and communication technology currently dominate discussions about technology in education. Many of the studies of computer technology in teacher education described how teachers were taught to use the technology. Researchers also emphasized the importance of modeling for teachers how technology can be used to support literacy and learning in the classroom. However, the more specific question of preparing pre- and inservice teachers to integrate technology in literacy instruction and curriculum is less well investigated, and much more research is needed in this area. Preparing Tomorrow's Teachers for Technology (PT3), an initiative of the U.S. Department of Education, seeks to induce a shift to "technology-infused teaching" within schools of education so as to transform the future classrooms of today's prospective teachers.

Emerging Themes

Three themes emerged from our review of the literature. These themes reflect some of the most fundamental issues and concerns in literacy-teacher education.

Connecting Theory and Practice

One of the challenges in preparing literacy teachers is to provide a coherent and meaningful learning experience that is grounded in theory and truly reflective of classroom practice. Most teacher-education programs combine coursework with field experiences such as classroom observations, tutoring, or internships. These experiences are intended to help preservice teachers connect theory with instructional practice, but student teachers often find that coursework is devoid of context and that field experiences (context) may not match coursework. Video-based case methodology enables pre- and inservice teachers to observe literacy instruction and learning in actual classroom settings. Video cases also enable teachers to observe teaching without the constraints of time and place, unlike real classroom observations. Also, hypermedia technology allows teacher educators to electronically link video cases with course readings.

Modeling

Teaching is generally acknowledged to be an ill-structured domain, requiring the application of conceptually complex knowledge to diverse and unpredictable situations. Using technology to model instructional approaches (e.g., videotaped demonstrations of DRTA) enables teachers to observe the complexity inherent in literacy learning and instruction.

Reflective Practice

Reflecting on one's practice plays an important role in the internal process of change, which in turn affects behavior. Studies of computer-mediated communication in teacher education show the potential for encouraging reflection and dialogue among both prospective and practicing teachers. Because discussion and dialogue are critically important in teacher education, technology can facilitate communication between teachers and ultimately the creation of a learning community.

Directions for Research

We can draw only tentative conclusions from the literature. First, we know that teachers do learn how to use technology. There have been positive reports of teachers' responses, reactions, and interactions with technology in the course of their professional education. Second, we know that technology is important in the work of teacher educators, not just in developing teachers' knowledge and skills, but also in encouraging reflection and building communities of practice. Third, we know more about the use of technology for preservice literacy education than we do for inservice education. However, despite the larger number of preservice studies in technology, we lack evidence of the effects of such preparation on the students (e.g., student performance). Because the research on literacy and technology is limited, it is difficult to say what teacher education for literacy instruction with technology should look like. Clearly, there needs to be a systematic research agenda to explore these issues and answer basic questions. How should researchers define literacy (or literacies) in the context of computer technology? Future research should examine what constitutes literacy in technology-infused teaching and learning. What should teacher educators teach teachers about literacy and technology? It is important for teachers to learn how to use technology, as well as experience it in their own learning.

Another topic for future research is long-term professional development. In many of the studies we reviewed, it is not clear how effective professional-development efforts have been, and many questions remain. For instance: What specific changes in teachers' beliefs, attitudes, or behaviors occurred? Were the changes sustained over time? Did they have an impact on students' learning? It is often said that instructional change for teachers happens slowly. If so, how do we support teacher learning over time? Will online support be able to sustain change in teacher behavior? Professional development must continue long enough for teachers to see progress in their students and themselves.

The above discussion is an attempt to characterize a field that is still grappling with important basic questions. Many issues in technology, literacy, and teacher education remain as rich areas for investigation. ⌘

Reflective Inquiry as a Tool for Professional Development

Gay Su Pinnell and Emily M. Rodgers, The Ohio State University

Reflective inquiry in teaching requires that teachers reflect upon their teaching practices and make deliberate inquiries about their instruction and decisions. In this article we describe a multifaceted reflective-inquiry model of professional development that we have researched and developed in both classroom and tutorial settings. The goal of professional development is to enable teachers to analyze and learn from their own work with children. Within each setting we draw from our research with classroom teachers and teachers of young struggling readers. Classroom teachers are part of Literacy Collaborative, a comprehensive school-development project that has the purpose of implementing research-based literacy practices in classrooms through ongoing professional development. The tutors of struggling readers are Reading Recovery teachers who work one-to-one with the lowest performing first-grade students in their schools. They teach daily 30-minute Reading Recovery lessons for half of the day and then work with small groups, classrooms, or in some cases as staff developers, for the other half of their day.

Reading Recovery teachers take part in a yearlong plan of professional development during their training year, and in subsequent years, they attend six sessions with other teachers every year that they remain a Reading Recovery teacher. A core feature of the professional-development experience, both in the training year and afterwards, is the experience of teaching behind a one-way mirror while colleagues on the other side of the mirror view the lesson and discuss the teaching. A specially trained staff developer, called a teacher leader, guides the teachers' observations and analyses of what the child is able to do and needs to learn how to do next. Following the two lessons taught behind the glass, all teachers, including those who taught, analyze in greater depth the issues around teaching and learning that arose during the lessons.

In our work, we have evaluated professional development in many ways. We collect extensive feedback from the teachers and staff developers who are involved, and their responses indicate that reflective inquiry has a profound effect on their thinking. We have also closely observed in systematic ways the changes in teacher behavior that result from professional development. We also measure student achievement. In both the classroom and tutorial settings, we have observed an upward trend in student achievement. While we cannot directly attribute this student success to reflective inquiry, it is reported by teachers to be a critical component of their long-term development of skill and by staff developers as an important and necessary factor in school improvement.

Significance of Reflective Inquiry

Teaching and learning require complex thinking. Teachers must observe students closely and make constant adjustments to their teaching to support learning. In recent years, constructivist theories have been applied to help us better understand the adult learning that must take place if teachers are to constantly improve their work to meet the demands for higher student literacy achievement. A key principle in constructivist theory is the critical role reflection plays in the learning process. Thus, professional development for teachers should include opportunities for teachers to reflect on their practice, to think about what is working and why, and to consider what is not working and why not.

Teachers can work independently to be reflective about their teaching practices, but we also know that a coach can be instrumental in bringing about change. The coach supports and leads the teachers' reflections, helping the teachers to listen to each other and consider alternative views. In addition, research also suggests that peer observations and feedback can be very effective in bringing about change to practice. Accordingly, we advocate a balance of collaborative inquiry, coaching, and independent reflection, with all three ways of learning available to teachers as they take on new understandings. Our professional-development model of reflective inquiry for classroom teachers and tutors includes all of these elements. Teachers engage in reflective inquiry in three contexts throughout a school year: (a) with a group of teachers, (b) with a coach, and (c) independently.

Collaborative Reflection

In collaborative reflection, colleagues and a staff developer support reflective inquiry. The goal is to build group understanding of behavioral phenomena and theoretical ideas. Teachers work in small groups to observe teaching in a classroom or tutoring room, view videotapes of their own teaching, or observe a group member or another teacher working with a group or individual child through a one-way mirror. Each person has the responsibility to take others' questions and comments as invitations to help the group achieve better understanding.

Coached Reflection

In coached reflection, coaches work individually with teachers to support their inquiry into their teaching. Coaching is most effective when it helps teachers perform their own analyses. At first, the coach may demonstrate and/or tell the teacher the

particular procedures involved in the instructional approach. Once the teacher has implemented the practice, there is more opportunity to reflect on the process and go deeper into the kinds of adjustments needed for powerful teaching. Over time, as teachers become more expert in any given instructional practice, they take over more of the process and are able to enter into collaborative problem solving with regard to the practice.

Independent Reflection

In independent reflection, the ultimate goal of reflective inquiry, teachers independently reflect on teaching decisions and practices. Expert teaching is built as individuals expand their understandings over time, learning from each child or group of children.

Characteristics of Reflective Inquiry Across Settings and Teachers

The multifaceted model of professional development that we describe provides opportunities for reflective inquiry in three different contexts: collaborative reflection, coached reflection, and independent reflection. In both classroom and one-to-one teaching settings, reflective inquiry is most powerful when the following features are present.

Balance of Support

The goal of professional development is always independent reflection, but if we are to expand present understandings, take on new learning, and gain new insights, reflective inquiry through collaboration with peers and a coach is more effective.

Focus on Student Learning

Our experience with both classroom teachers and tutors suggests that effective reflective inquiry requires opportunities for collaborative problem solving with peers (teachers) that focuses on children's behavior as evidence of learning. Videotapes are helpful, but actual learning experiences provide real learning and real teaching, in real time. Teachers gain experience with closely observing children, gathering evidence, posing theories, and reflecting on teaching decisions in real time, but because they are observing the lesson and not actually teaching, there is space for reflection.

Focus on "Next Steps"

Collaborating with peers or a coach provides support to teachers for planning the next step with students, and this seems to be at the very heart of reflection. Adapting behavior based on reflective inquiry is what makes reflection a powerful tool for professional development.

Reflective Inquiry in Preservice Teacher Education

Reflective inquiry should focus on simple, practical problems, giving teacher-education students many opportunities to discuss their initial classroom experiences. We have successfully used videotape analysis for teacher education students who are participating in classrooms by keeping the focus narrow (e.g., working with one child or with a small group over several weeks) and being very specific about the tasks in process and highly supportive of the analysis. In these experiences, preservice teachers are gaining skill in the particular instructional technique but also beginning to observe themselves. The development of reflective inquiry as part of preservice teacher education facilitates further learning after graduation.

Professional Development for Inservice Teachers

The real promise of reflective inquiry is its incorporation into ongoing professional development. Through reflective inquiry, teachers constantly improve their thinking about teaching; moreover, they continually renew their enthusiasm for their work because they increase their success with students. Educators hear a good deal today about implementing research-based practices in classrooms to improve literacy learning. No matter how well founded practices may be, they will not result in greater student learning unless they can be established in classrooms. And having only one or two effective teachers in a school will not make a difference for larger numbers of children. Today's students need consistent effective instruction in the elementary years. The delivery of research-based reading practice must be nested within a comprehensive school-reform effort that brings teachers together for further learning and enlists their commitment to the process. When teachers have the opportunity to look deeply into their teaching, reflect on teaching, and live within a learning community, taking on new practices is continuous and automatic. ⌘

The LSS REVIEW
Dana Jones Robinson
Editor

This publication is supported in part by the Mid-Atlantic Regional Educational Laboratory, the Laboratory for Student Success (LSS). The opinions expressed do not necessarily reflect the position of the supporting agencies, and no official endorsement should be inferred.

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Professional Development at Benchmark School

Irene W. Gaskins, Benchmark School (PA)

Teachers play a crucial role in determining student progress. And because there is not one practice that is always best, teachers should be aware of a variety of teaching practices that might be used to accomplish the same learning goal. Making decisions about the best practice for a particular student and situation requires judgments based on knowledge of pedagogy, learning theory, and research, as well as on careful reflection on classroom experiences. Such knowledge is impossible to acquire in a few short years of preservice education and requires classroom experience in conjunction with lifelong learning. School leaders can foster this lifelong learning by providing school-based, long-term, collaborative professional development that is related to teachers' classroom practices and that features ongoing and reflective professional dialogue.

In this article, I will discuss the professional-development activities available to teachers at Benchmark School, a school dedicated to developing methods for teaching students who enter the school as struggling readers. Example activities include (a) apprenticing with a master teacher; (b) collaborating with staff to improve instruction and develop curriculum; (c) participating in the development and maintenance of curriculum initiatives; (d) cultivating partnerships with local universities; (e) attending seminars, meetings, inservice programs, and retreats; (f) reading professional literature and viewing videotapes on relevant subjects; and (g) writing about one's practice.

Apprenticeship

The motto for professional development at Benchmark is "each one teach one." New teachers at Benchmark begin as support teachers who assist the head classroom teachers by instructing small groups, interacting with students about their written responses to literature, and helping in other ways that the teachers may request. The following year the support teacher may work with a different teacher, become a coteacher, or be designated a teacher-in-training and spend the year in the classroom of Benchmark's teacher trainer. The teacher-in-training shadows the master teacher throughout the school day for an entire school year and participates in staff development opportunities at the school. Coteachers share more fully in instructional responsibilities and interactions with parents than support teachers or teachers-in-training. Susan North's experience is an example of an apprenticeship at Benchmark. Susan was hired as a support teacher and assigned to a classroom in which I was piloting a new word identification program. Throughout the year, the head teacher, coteacher, Susan, and I discussed the effectiveness of the word identification program for Benchmark students. We alternated teaching, observing, and giving feedback to one another about the effectiveness of the program. The result of our work was improved lessons and Susan's development into an increasingly competent teacher. The following year Susan was a support teacher with another veteran teacher and younger children. In her third year at Benchmark, Susan was apprenticed to the teacher trainer. Susan learned how to prepare for, manage, and carry out the many duties of a head classroom teacher.

Collaboration

Collaboration is key to the success of professional development at Benchmark. Teachers collaborate with their supervisors to provide students with the instruction they need to make satisfactory academic progress. Teachers collaborate among themselves to plan units, design lessons, develop curriculum, and observe each other teach. Teachers also collaborate with the psychologists, counselors, and social workers in support services to meet the academic, social, and emotional needs of each student. As a result, teachers acquire in-depth knowledge about students and families. They are then better equipped to help students achieve success in school.

Benchmark staff members also collaborate with colleagues outside of the school, including experts in cognitive psychology and education, to develop a curriculum that is appropriate for our struggling readers. Because our curriculum is continually evolving, maintaining the curriculum initiatives we put in place is challenging. The responsibility for this stability is placed largely on supervisors, who work side by side with teachers each day. Their goal is to ensure that the research-based core of each initiative is maintained. At the same time, supervisors and teachers are constantly honing the initiatives on the basis of their experience and new research findings.

Benchmark School maintains a collaborative relationship with one or more of the local universities in the greater Philadelphia area. For example, each summer for the past decade, a professor from West Chester University has taught a reading practicum course at Benchmark. The students in the course assist Benchmark summer program teachers each day and then meet with their professor in the afternoon. In other instances, a staff member or I may be asked to teach a course at a local university or to supervise an independent study. All of these interactions stimulate new ideas about curriculum and instruction and how to foster our goals with students. Further, such relationships keep us on the cutting edge with

respect to thinking and practice.

Seminars, Meetings, and Inservice

Benchmark's research seminar is a major source of ideas for honing curriculum and instruction. Attendance is voluntary, and each year participants select a topic for reading and discussion. This year's topic, the relationship between temperament, learning style, and student learning, is the basis for an interactive learning profile that we are developing. The profile will help us assess our students' strengths and challenges more systematically.

Induction seminars are an important source of social support for teachers. In induction seminars, support teachers meet as a group with their supervisor each week to learn about the school, its students, and classroom routines. The teachers discuss topics related to teaching and get to know each other while sharing their classroom struggles and victories.

Teachers also attend weekly or biweekly team and level meetings. In team meetings, teachers may discuss how to refine their instruction, how to communicate with parents, they may write trimester reports, solve issues of common concern, or plan events that affect all members of the team (e.g., Back-to-School Night). In level meetings, which are divided into six groups by student reading level and age, teachers meet to discuss such topics as curriculum, standards and rubrics, and traits of good writing.

Benchmark teachers also participate in monthly inservice programs and occasional "retreat days." During inservice programs, teachers learn about and discuss issues relevant to teaching and learning, such as developing standards for writing; on retreat days, teachers research and develop instructional units.

Opportunities for professional development also occur outside of Benchmark School. Teachers are encouraged to attend local workshops and professional conferences such as the annual meetings of the International Reading Association and the National Reading Conference. Some teachers present papers at the conferences. Prior to a conference, teachers present their papers to the entire Benchmark staff; when they return, teachers share summaries of the major ideas they learned from their experiences.

Professional Writing and the Benchmark Library

Perhaps unique to Benchmark is the fact that the staff and I do a lot of writing about how we adapt research-based findings to teaching. For example, one publication describes the development of the Benchmark Word Identification Program. The paper was the result of four years of drafting, editing, rewriting, and most of all, learning from one another. In another instance, Benchmark staff worked with university-based colleagues to develop the transactional-strategies-instruction model. The process was a productive reciprocal collaboration: University researchers interviewed and observed in Benchmark classrooms, and Benchmark staff members read and responded to manuscript drafts.

We have learned that writing about practice is a powerful form of professional development at Benchmark School, and teachers use the Benchmark professional library frequently. The library includes scholarly books and journals on topics such as literacy, subject-content areas, elementary- and middle-school education, leadership, and technology. The professional library also contains videotapes of classroom instruction and inservice presentations at Benchmark.

Conclusion

Teachers determine the quality of instruction that children receive. Yet neither an undergraduate degree in education nor a teaching certificate is evidence that a teacher is prepared to deliver the excellent instruction students deserve. Degrees and certificates are starting points. To teach well and meet the diverse needs of students, teachers must have a variety of classroom experiences and engage in high-quality professional-development activities (on- and off-site) throughout their careers.

Professional development should be the foundation of a school's curriculum and instruction. To help children fulfill their potential, schools and the public must provide the resources necessary to develop highly knowledgeable, well-trained teachers. It is not possible for preservice programs to achieve this goal in the short time professors have with potential teachers. Without the foundation provided by high-quality, school-based, professional development, improved student outcomes will not become a reality. Increasing school budgets for professional development is necessary; however, spending money on professional development does not ensure that high-quality professional development will result. High-quality professional development is much more than one-shot inservice programs. It is ongoing learning that is part of the fabric of the school.

In this article, I have shared some of the professional development options that are valuable for improving instruction for the struggling readers at Benchmark School. Our goal is to enable struggling readers to feel competent and to improve not only in reading, but also in knowledge about themselves and how to learn in all subject areas. To do this, we must add to our knowledge of teaching through professional development, a lifelong journey that is best traveled in collaboration with colleagues. ⌘

In the next *LSS REVIEW*...

Nurturing Morality

Distributed Leadership for Instructional Improvement

The Principal's Role

Michael Aaron Copland, University of Washington

The demands of school leadership are many and complex. School leaders juggle instructional, managerial, and political functions, framing and solving problems that emerge while trying to incorporate new initiatives that come from the district, the state, or the nation, particularly in the area of literacy. Principals and other leaders are challenged to ensure that their schools meet specified standards (i.e., demonstrable progress in student outcomes, particularly in the area of literacy) in a climate of heightened expectations, inspection, choice, and criticism. Indeed, the most central task facing school leadership today is the guidance of instructional improvement.

Fortunately, these changes create new possibilities and directions for improving teaching and learning. The current trends prompt the evolution and expansion of leadership roles and opportunities for others at the school, swelling the boundaries of responsibility and accountability for leadership action beyond the principal's office to include teachers and other school and community members as partners in decision making and leaders of instructional improvement. These trends also provide a unique set of circumstances for the exercise of distributed leadership specifically focused on providing high-quality instruction.

In this article, I discuss distributed leadership practice that aims to promote high-quality (literacy) instruction. I present two cases of school leadership that highlight professional-development work focused on literacy instruction and illustrate the practice of distributed leadership. The article concludes with some common practices that principals employ to meet the challenges in context.

Rethinking Instructional Leadership

Empirical evidence regarding distributed leadership indicates that, within school communities that achieve excellent results in improving teaching and learning, leadership is not principal-centric, but embedded in various organizational contexts. For example, a recent examination of organizational-context effects on teacher community, teaching, and teachers' careers found that successful principals collaborated with teacher leaders and were respectful of teaching culture, providing support for teachers in various ways. The principals were committed to student academic excellence and to building teachers' commitment and capacity to pursue this collective goal. Most important, the responsibility for sustaining instructional improvement was shared among a broad group of school- community members.

No school is exactly like the next, yet virtually all school leaders face challenges similar in nature to those described earlier. So, what do principals do to improve instruction in a distributed-leadership arrangement? How might the broader distribution of responsibility for instructional improvement alter the principal's role as the "formal" leader in the school? The next section highlights two examples from the literature of distributed-leadership practices that emphasize improving literacy instruction and illustrate that quality professional development focused on aspects of literacy learning, as well as other content areas, can become an essential component of teachers' and administrators' routine work.

Distributed Instructional Leadership

Slattford Elementary School

At Slattford Elementary School (pseudonym), teachers meet in grade-level teams for a half-day biweekly to examine their current practice in relation to school goals for improving learning. Recently, Slattford's kindergarten teachers have designed an inquiry plan to deliver the best instruction to second-language students. Each teacher observes two second-language students every month in the classroom and in the schoolyard. Teachers record their data in progress charts, updating them every month at the meetings. The teachers compare observations and make informed changes in practice that respond to their students' specific needs, such as developing games and lessons that are conducive to language production, or redistributing students periodically for more intensive work in homogeneous language groups.

Slattford's principal, Tom Phillips (pseudonym), participates in each meeting and works with individual teachers to develop evaluation criteria for improved literacy instruction. He also gives teachers feedback from his classroom observations. Phillips' role in this effort is to understand the needs of students in context, to guide and structure teacher leadership activity in service of those needs, to support teacher leaders' efforts with ample allocation of time for teachers to meet, and to participate as an active learner in the process of inquiry with teachers.

New Harbor Elementary School

At New Harbor Elementary School (pseudonym), teachers meet in "midday blocks" each day for 90 minutes of professional development. The format of the meetings varies; teachers debate instructional theory and practice, try to solve problems that have come up or are likely to come up in their classrooms, discuss curriculum, commiserate, seek advice, offer encouragement, or quietly reflect on or refine a lesson plan. In one instance, teachers were asked to analyze a piece of student writing to determine the next step in instruction. Using samples of work from the two students they each had decided to use for yearlong case studies, they offered suggestions for how best to improve each student's writing.

New Harbor's principal, Terry Barton (pseudonym), evaluates teachers on literacy and math instruction. Barton takes notes on student–teacher interaction during class instruction and leaves the teachers with questions regarding their practice. The teachers reflect on their classroom actions during a follow-up meeting with Barton. Curriculum and classroom-assign-

ment decisions are rooted in data about how well the processes serve children.

Leadership Lessons

Five key themes emerge from the cases presented here. The themes capture the essence of how the principals promote and distribute leadership for learning. Each theme is discussed below.

Persistent, Public Focus on Learning

Principals need to establish norms, beliefs, and goals within the school community that are learning-focused, both for students and for professionals, and then consistently support those goals. In the school cases, each principal maintains a public focus on aspects of literacy learning that is tied to the mission of the school. The principals illustrate through their words and actions with students, teachers, and parents that high-quality literacy teaching and learning matter. Teachers and administrators work together to co-construct this focus, and each principal evaluates teaching practices in reference to the focus.

Inquiry-Based Improvement

The principals and teachers of both schools employ approaches to ongoing inquiry that involve examining student-achievement data, collected from various sources, that is focused on particular content areas or student populations targeted for improvement. The primary means for instructional improvement are conversations among the teachers and principals themselves. An inquiry-based approach gives voice and merit to the views of all school community members in the development, implementation, communication, and evaluation of a focused effort that defines the school's most important work. The case-school principals also attend to the learning skills teachers will need in order to carry out a cycle of inquiry (e.g., developing accountability frameworks). Teachers receive ongoing professional development in these skills so that the skills may eventually become a regular part of their professional repertoire.

Structural Supports

Perhaps more than any other aspect of principal leadership, the creation of structures that enable teachers to have time together focused on teaching and learning issues is key. Mobilizing time and people around organizational purposes creates a work environment that motivates and sustains continual effort toward identified goals for improving teaching and learning. The case-school principals use available time and resources to allow teachers to meet for ongoing professional development.

Shared Responsibility for Decisions

Principals have to be willing to share leadership functions traditionally associated with the role. Principals who are successful in building leadership capacity and promoting instructional improvement ask questions, explore data, and engage the faculty and the broader community in efforts to accomplish school goals. Successful principals recognize expertise in others and provide ways for it to bloom; for example, individuals who have expertise in literacy teaching and learning take leadership in that area.

Principal Participation as a Learner

Principals who participate as a learner in classrooms and professional-development sessions demonstrate that learning is important. Furthermore, they deepen their own understanding and ability to contribute to the important dialogue about improving instruction in content areas. In promoting high-quality literacy teaching, the ability to lead is rooted in the leaders' thinking, beliefs, and understanding about literacy and literacy instruction. Developing knowledge of good literacy instruction and how to speak the language of instruction with teachers by actively participating in professional-development efforts builds leaders' credibility and trust, and focuses their ability to scrutinize instructional practices.

Conclusion

In the current landscape of challenges facing school leadership, improving teaching and learning emerges as the primary responsibility. The principal's role in fulfilling this responsibility remains crucial. Yet consistent with current notions of leadership distribution, principals cannot accomplish all that is expected without the careful and thoughtful leadership of teachers and others in the school. The building of such partnerships requires principals to focus clearly and consistently on a vision for learning, and to promote inquiry into practice through the creation of structures that support collaborative work focused on improving teaching and learning. By distributing leadership for instructional improvement and taking seriously their own ongoing, professional learning, principals can work in concert with others to accomplish great results for students. ⌘

(**Teachers**, continued from p. 3)

Conclusion

Research indicates that the most effective teachers adapt instruction to fit situational needs, and that the way to develop adaptive teachers is through educative professional development that strives to promote autonomy and decision making. However, as pointed out in a recent article, the professional-development debate is not necessarily responsive to research evidence, because positions are essentially ideological, and different values lead to different positions. Research supporting educative professional development is minimized by those who feel pressured to find a "quick fix" for struggling readers and by those who object to increasing financial investment in teachers. Therefore, to improve reading achievement through professional development, we must not be naïve about the difficulty of the task, and we must be proactive in pursuit of the goal. ⌘

(K–3 Teachers, continued from p. 8)

Professional development can show teachers how to use informal classroom assessments to evaluate students' performance in the five components of reading instruction. For example, the Yopp-Singer Phonemic Awareness Test can assist teachers in determining which students may need assistance in phonemic awareness and which children come to class not needing such support. Thus, informal assessment can be used as a basis for providing students with instruction

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and practice.

Professional Development for K–3 Teachers: The Process

What professional-development activities are most likely to help teachers adopt new instructional strategies and procedures for teaching reading in their primary classrooms? Research suggests that the traditional service delivery model, typically a "one-shot" workshop, is ineffective for improving teachers' classroom instruction; rather, teachers need ongoing assistance and support as they implement new instructional strategies in their classrooms.

Effective professional-development programs offer (a) theoretical knowledge of instructional strategies, (b) mentor teachers to demonstrate the strategies with students, (c) time to practice the strategies in the classroom, and (d) feedback and in-class coaching from mentor teachers. These features of a professional-development program increase the likelihood that teachers will take ownership of the instructional strategies and use them daily in their classrooms.

Conclusion

Teaching primary-grade children to read is a complex task, involving a myriad of organizational and instructional decisions. To teach primary children effectively, teachers need support and assistance through ongoing and continuous professional development. Professional-development activities for teachers should include opportunities to learn about theory, research, and practice (including the five components of reading); effective classroom organization techniques; and how to assess student progress. Other necessary activities include having teachers observe model lessons by mentor teachers and others, and then practicing new strategies in their own classrooms with support from mentor teachers. If all of these elements are not incorporated into professional-development efforts, professional-teachers will not receive the support they need to help children develop high literacy skills. ⌘

(Salient, continued from p. 11)

teaching skills and teaching content.

Conclusion

Similar to those individuals who write about the relationships between adolescents and adults as they engage in multiple forms of literacy within and against the backdrop of the digital world, we believe that knowing how adolescent–adult relationships develop, change, or sustain themselves over time is key to understanding adolescents and their multiliteracies in New Times. With this kind of knowledge, professional-development experts are less likely to make inappropriate assumptions about what is salient for teaching and learning in the content areas, and instead recognize that professional-development efforts should include a focus on incorporating adolescent multiliteracies and collaborative activities into literacy instruction. ⌘