

Teaching Reading Well

A Synthesis of
the International Reading Association's
Research on Teacher Preparation
for Reading Instruction

STATUS OF
**Reading
Instruction
Institute**

INTERNATIONAL
 **Reading Association**
800 BARKSDALE ROAD, PO Box 8139
NEWARK, DE 19714-8139, USA
www.reading.org

IRA BOARD OF DIRECTORS

Timothy Shanahan, University of Illinois at Chicago, Chicago, Illinois, President • Linda B. Gambrell, Clemson University, Clemson, South Carolina, President-elect • Barbara J. Walker, Oklahoma State University–Stillwater/Tulsa, Tulsa, Oklahoma, Vice President • David Hernandez III, Camelview Elementary School, Madison School District, Phoenix, Arizona • Susan Davis Lenski, Portland State University, Portland, Oregon • Jill Lewis, New Jersey City University, Jersey City, New Jersey • Diane Barone, University of Nevada, Reno, Nevada • Maureen McLaughlin, East Stroudsburg University of Pennsylvania, East Stroudsburg, Pennsylvania • Karen K. Wixson, The University of Michigan, Ann Arbor, Michigan • Adelina Arellano-Osuna, University of the Andes-Mérida, Mérida, Venezuela • Lloyd Neale Hardesty, Colorado Springs, Colorado • Maryann Manning, University of Alabama at Birmingham, Birmingham, Alabama • Alan E. Farstrup, Executive Director

NATIONAL COMMISSION ON EXCELLENCE IN ELEMENTARY TEACHER PREPARATION FOR READING INSTRUCTION

James V. Hoffman, University of Texas at Austin, Chair • Cathy M. Roller, International Reading Association, Newark, Delaware, Commission Director • Diane Barone, University of Nevada, Reno • Deborah Eldridge, Hunter College, New York, New York • Joyce Fine, Florida International University, Miami • Amy Seely Flint, Indiana University, Bloomington • Denise Littleton, Norfolk State University, Virginia • Rachelle Loven, University of Sioux Falls, South Dakota • Beth Maloch, University of Texas at Austin • Miriam Martinez, University of Texas at San Antonio

TEACHER EDUCATION TASK FORCE

Victoria J. Risko, Vanderbilt University, Nashville, Tennessee, Chair • Patricia L. Anders, University of Arizona, Tucson • Rita M. Bean, University of Pittsburgh, Pennsylvania • Cathy Collins Block, Texas Christian University, Fort Worth • Carrice Cummins, Louisiana Tech University, Ruston • Alan Farstrup, International Reading Association, Newark, Delaware • James Flood, San Diego State University, California • Richard Long, International Reading Association, Washington, D.C. • Lesley Mandel Morrow, Rutgers University, New Brunswick, New Jersey • P. David Pearson, University of California, Berkeley • Timothy V. Rasinski, Kent State University, Ohio • Cathy M. Roller, International Reading Association, Washington, D.C.

The International Reading Association acknowledges the work of Susan Pimentel, who wrote this report.

Teaching Reading Well

A Synthesis of the International Reading Association's Research on Teacher Preparation for Reading Instruction

Putting a quality teacher in every classroom is key to addressing the challenges of reading achievement in schools. Knowledgeable, strategic, adaptive, and reflective teachers make a difference in student learning.

This basic premise permeates the current policy environment in the United States. The No Child Left Behind Act, the most recent reauthorization of the Elementary and Secondary Education Act, mandates no less than a “qualified teacher” in every public school classroom. Since colleges and universities prepare the majority of teachers, they have a pivotal role to play in achieving this goal. The challenge is particularly great in schools that serve high-poverty populations.

The International Reading Association (IRA), the world's foremost organization of reading professionals, has focused significant research efforts on identifying essential qualities of effective teacher preparation programs. IRA completed a major programmatic study of the preparation of classroom teachers in reading through its National Commission on Excellence in Elementary Teacher Preparation for Reading Instruction (IRA, 2003a). The Commission specified the features that were common to eight excellent programs identified through a competitive application process (Harmon et al., 2001). IRA's Teacher Education Task Force (TETF) followed that research with a comprehensive review of the empirical literature in the area of teacher education in reading (Risko et al., in process). The findings of these research efforts are synthesized in this document. Teacher educators from across the country can use the knowledge and insights generated from these investigations to spur reflection and to improve their teacher preparation programs in reading.

Together, the IRA Commission and Task Force efforts identified six essential features for creating and sustaining preparation programs that produce teachers who teach reading well:

- **Content**—The programs draw on an integrated body of research focusing on how students become successful readers and how teachers support students with instruction.
- **Faculty and teaching**—The faculty is committed to effective instruction that delivers appropriate content and models successful instructional techniques for students.
- **Apprenticeships, field experiences, and practica**—The programs move teachers through systematically arrayed field experiences that are closely coordinated with their coursework and expose them to excellent models and mentors.
- **Diversity**—The programs are saturated with an awareness of diversity, their faculties and students reflect diversity, and they produce teachers who know how to teach diverse students in diverse settings.
- **Candidate and program assessment**—The programs intentionally and regularly assess their students, graduates, faculty, and curriculum to guide instructional decision making and program development.
- **Governance, resources, and vision**—The programs are centered on a vision of quality teaching that produces a community of future leaders in reading education. The governance gives faculty appropriate control for realizing that vision.

To experienced teacher educators, none of these components will come as a surprise, but achieving excellence in all six components is difficult. In the Commission study, for example, IRA (2003a) noted significant variation among the eight participating programs with respect to the components, despite the fact that all eight had been identified as excellent. Because colleges and universities play a significant

role in placing a quality teacher in every classroom, they must examine seriously the content and structure of their teacher preparation programs in light of the portrait of excellence these components present. Only when programs are intentionally striving for excellence will they produce teachers who can meet the demands of today's classroom environments.

What do we know about teacher education programs and the quality of preparation they provide? What do we know about the success of beginning teachers as they move from undergraduate programs into full-time teaching responsibilities? While gaps remain, the research summarized here brings the overall picture into focus. Outstanding reading education programs are grounded by content, powered by teaching, energized by apprenticeships, enriched by diversity, evaluated by assessment, and sustained by vision and good governance. Read on to discover what the future of teacher education in reading should look like.

Feature 1: Content

RESEARCH FINDING

Effective teacher educators design the reading components of their preparation programs around findings from research on how students

become successful readers and how teachers support their learning.

The core curriculum for reading education should equip graduating teachers to produce readers who are successful in the classroom and on standardized tests and use reading effectively to negotiate the world. There is growing consensus around a set of six foundational elements that teachers must use

to produce proficient readers and that should be included in any systematic program of study:

- **Foundation in research and theory**—Teachers must develop a thorough understanding of language and reading development as well as an understanding of learning theory and moti-

vation in order to ground their instructional decision making effectively.

- **Word-level instructional strategies**—Teachers must be prepared to use multiple strategies for developing students' knowledge of word meanings and strategies for word identification. This includes the study of the phonemic basis for oral language, phonics instruction, and attention to syntax and semantics as support for word recognition and self-monitoring.
- **Text-level comprehension strategies**—Teachers must be prepared to teach multiple strategies that readers can use to construct meaning from text and to monitor their comprehension. They must understand the ways in which vocabulary (word meaning) and fluency instruction can support comprehension and develop the capacity for critical analysis of texts that considers multiple perspectives.
- **Reading – writing connections**—Teachers must be prepared to teach strategies that connect writing to the reading of literary and information texts as a support for comprehension. This includes attention to teaching conventions of writing.
- **Instructional approaches and materials**—Teachers must be prepared to use a variety of instructional strategies and materials selectively, appropriately, and flexibly.
- **Assessment**—Teachers must be prepared to use appropriate assessment techniques to support responsive instructional decision making and reflection.

A closer look at each of these elements of the core curriculum reveals a system of practices, procedures, and materials—supported by research findings—that beginning teachers should master and apply to increase the reading proficiency of their students.

Element 1: Foundation in Research and Theory

Research is the bedrock of excellent preparation programs. Research informs theories, and theories guide decision making. Without research and

I found that when I started out, the research that I was taught was very current.

Other people who graduated at the same time as me from other schools—they weren't learning that current research.

BEGINNING TEACHER, GRADUATE OF
THE UNIVERSITY OF SIOUX FALLS

theory as a base, practice is doomed to fall short. Beginning teachers must have a thorough command of language and reading development as well as deep understanding of learning and motivation theory. One finding from the IRA Commission's study was that excellent preparation programs are organized around a profound sense of mission and are guided by a powerful vision of teaching (IRA, 2003a). Strong theoretical foundations provide the guiding principles that give such programs coherence.

The TETF review (Risko et al., in process) also supports the notion that strong theoretical underpinnings provide coherence. Indeed, the largest group of studies in the review addresses theoretical foundations. The review suggests that excellent teacher education programs are successful in challenging the traditional theories of instruction students often hold initially—that is, a view of instruction as transmission and rote learning. Through methods courses in particular, these programs shift their students to more constructivist understandings of learning as creating knowledge. While the studies in the review were not unanimous in adopting this stance, the constructivist approach was by far the most common theoretical orientation. Several studies attributed students' changing orientations to the consistency with which such theory guided coursework and field experiences.

The ability of beginning teachers to sustain these theoretical beliefs in the face of practice settings that were inconsistent with them was a topic of concern both in the Commission study (IRA, 2003a) and the TETF review (Risko et al., in process). While often beginning teachers appeared to abandon the orientations of their preparation programs, strong students from the eight Commission programs were able to maintain their theories—and, in fact, to convince others in their school settings to change their theoretical orientations and their practice.

Element 2: Word-Level Instructional Strategies

These are an essential component of reading—and, thus, of reading instruction. Teacher candidates report a strong desire to learn how to provide explicit

instruction in word identification, including phonemic awareness and phonics (Fielding-Barnsley & Purdie, 2005). The eight Commission programs all included strong instruction related to word-level strategies (IRA, 2003a). In exemplary programs, teacher candidates are taught to apply their understanding of phonics and phonemic awareness to word-recognition instruction.

Phonemic awareness and phonics. Within this area of word-level strategies, the research is extensive and unambiguous. Children who are systematically taught to manipulate spoken phonemes show significant improvement in both their spelling and word-recognition ability (National Institute of Child Health and Human Development [NICHD], 2000, pp. 7–8). Knowledge of phonemic awareness must be considered foundational. Further, explicit phonics instruction supports children of all backgrounds and skill levels in learning the alphabet, improving their spelling, and decoding new words—leading to gains in their reading ability (NICHD, p. 8). When phonics instruction is systematically incorporated into the reading curriculum such that children automatically apply phonics skills when encountering new words, word recognition and reading comprehension increase (NICHD, pp. 8–11).

Syntax and semantics. Research on the developing reader's use of syntax and semantics to support word recognition and self-monitoring is found throughout the literature. Developing readers use these systems as they grow toward automaticity and fluency.

Making meaning. The focus on word-level strategies is not limited to word recognition but also includes attention to word meanings. A strong program attends to the ways in which reading, writing, listening, and speaking are mutually supportive systems in effective vocabulary development.

Element 3: Text-Level Comprehension Strategies

Comprehension and word-level strategies work in concert. Driven by research in vocabulary development, fluency, comprehension strategies, and critical literacy, the best programs teach multiple instructional approaches for enhancing student com-

prehension of all types of text, including those in core content areas.

Vocabulary development. Scientific studies show that vocabulary development is critically important for reading instruction and plays a crucial role in comprehension. By repeatedly exposing readers to rich content materials and to multiple strategies for learning new words, teachers foster an active, intentional reading process that engages students with text (NICHD, 2000, pp. 13–14). Beginning teachers who have graduated from the best programs know a variety of strategies, from direct instruction to contextual decoding of text, for fostering vocabulary development in their students, and they link vocabulary to text comprehension.

Fluency. Data on the effects of teachers employing guided oral reading to improve fluency point in the same direction: Students who receive intentional guidance and habitual feedback from the teacher when practicing reading aloud increase their reading speed and accuracy. Research shows both successful and struggling readers benefit from guided oral reading; readers who improve their fluency do better in recalling and situating text they have read and in demonstrating enhanced expression, greater word recognition, and increased reading comprehension (NICHD, 2000, pp. 11–12; Worthy & Patterson, 2001).

Comprehension strategies. Equally important are findings demonstrating that when students engage in intentional strategic reasoning, comprehension is markedly improved in the areas of recall, summarization, and responding to and forming questions about text (NICHD, 2000, p. 15). Students who have been formally taught by their teachers how to employ multiple reading comprehension strategies show gains on standardized tests and other measures (Alderman, Klein, Seeley, & Sanders, 1993; NICHD, pp. 14–15).

Strategies for content area reading. Students need to be provided in-depth instruction in reading strategies for core content areas (Bean, 1997; NICHD, 2000, p. 15). Several studies have shown that specific reading instruction in areas such as science, social studies, and math leads to improved reading comprehension in students. Teachers need

intensive, focused preparation in how to provide instruction and feedback to students so that they acquire and use these strategies for reading text from specific disciplines (Bean; Stevens, 2002).

Critical literacy. Finally, students must be encouraged to take a critical stance toward text in terms of judging its accuracy and validity. Critical readers analyze text for multiple meanings and multiple perspectives. These text-level comprehension strategies are developed across many different types of texts including narratives, informational texts, and electronic texts.

Element 4: Reading–Writing Connections

Writing instruction is connected to the reading of literary and informational text and to discussion and writing about those texts. Outstanding reading education programs take advantage of these kinds of reading–writing activities as occasions to teach standard writing conventions, and they connect the preparation teachers receive in writing competencies to an understanding of how to manage reading instruction across grade levels.

Research shows that employing an integrated system of reading, discussion, and writing about literary and informational text is a key element in improving comprehension. The role of storytelling in building language is well established, as is the power of drama and illustration for engaging readers in interpreting text. Studies also show that teachers who incorporate discussion and writing as a means of shaping and enriching readers’ responses to text further enhance comprehension.

Instruction in the conventions of language used in speech and writing is also a key element. For example, students must be taught how to punctuate their prose and to develop sentence and paragraph structures that accurately convey their meaning. As they engage with content area learning, students must learn the conventions of texts that may be nonlinear (e.g., graphs, charts, webpages). Students also need to be immersed in a classroom environment that prizes both reading and writing, and be guided by teachers in their compositional efforts with rubrics and texts to serve as models and guides.

Element 5: Instructional Approaches and Materials

These are the fundamental tools of reading instruction (NICHD, 2000, pp. 16–18). Studies in this area reveal that too often, teachers emerge from their preparation programs equipped with the latest information regarding word-recognition and comprehension strategies and familiarity with instructional materials, but they cannot implement approaches and use materials effectively in the reading classroom (Fielding-Barnsley & Purdie, 2005; Mottley & Telfer, 1997; Pearson & Gallagher, 1983; Wham, 1993). However, there are encouraging data as well: The research literature demonstrates that teachers in preparation can be taught how to use both the best methods and a range of materials for instruction. They can learn to implement good reading instruction based on the knowledge gained from their preparation programs (Alderman et al., 1993; Fazio, 2000; Grisham, 2000; Lonberger, 1992; Many, Howard, & Hoge, 1998; Matanzo & Harris, 1999; Risko, 1992; Risko, Peter, & McAllister, 1996; Roskos & Walker, 1993, 1994).

The information available regarding improving beginning teachers' delivery strategies is diverse and complex, but key trends are clearly discernable. First and foremost, teachers need to be taught the art of reading instruction. Just because a teacher is a good reader does not mean he or she will be a good teacher of reading; instruction in how to teach reading is required (Draper, Barksdale-Ladd, & Radencich, 2000; Many et al., 1998; Tercanlioglu, 2001). This does not mean that teacher educators should deliver instruction in how to use mechanical procedures, but rather that beginning teachers must be engaged in processes that teach them how to create a dynamic learning environment for their future students (Walker & Ramseth, 1993; Wilson, Konopak, & Readence, 1993). The research indicates that learning to teach reading cannot happen after a single course, but requires intensive study of instructional methods and materials over several semesters (Roskos & Walker, 1993; Walker & Ramseth; Wolf, Carey, & Mieras, 1996b). Beginning teachers also need to be informed about advances in incorporating technology in instruction (Boling, 2003; Roberts & Hsu, 2000). When they are provided with this array of instructional ap-

proaches and tools, graduates become thoughtful, articulate, and effective teachers of reading (Hoffman et al., 2005; Maloch et al., 2003).

Excellent preparation programs provide students with in-depth knowledge of literary and informational texts and other reading materials. Effective literacy instruction does not occur in a vacuum. Teachers engage learners with instructional materials and other texts inside a rich literacy environment that supports their teaching. They know and can apply strategies to create this high-quality classroom environment—that includes attention to children's and young adult literature, commercial reading series, electronic-based information sources, and locally created materials—and

The Hunter College teachers are so well prepared. Teachers from other schools can espouse the philosophy, but it's the implementation that they have trouble with.

PRINCIPAL, NEW YORK CITY PUBLIC SCHOOL

to engage students within it. Effective teachers are critical in the ways in which they analyze, adapt, and use instructional materials for the purposes of instruction in a particular teaching context. Sometimes all the intervention work done with a struggling reader, for example, comes together when the right book—or magazine or website—ignites him or her (Wolf, Carey, & Mieras, 1996a, 1996b).

Element 6: Assessment

Not only do beginning teachers need to learn how different assessment strategies, models, and approaches test student learning, they also need to be taught how to interpret assessment data critically and adjust classroom instruction accordingly. Instruction regarding implementing multiple evaluation strategies that assess all aspects of reading is essential for teachers (Briggs, Tully, & Stiefer, 1998). Proficiency with a set of formal and informal assessment tools to determine students' strengths and weaknesses—from checklists to standardized tests—is critical for measuring student progress, and it also provides the teacher with much-needed feedback regarding his or her instructional approach (Briggs et al.; Foegen, Espin, Allinder, & Markell, 2001; Traynelis-Yurek & Strong, 2000).

Content in Action

Students enrolled in the teacher preparation program at Hunter College in New York City pursue a rigorous curriculum aligned with the International Reading Association's (2003b) *Standards for Reading Professionals*. Having established a collateral major in a liberal arts discipline, the typical student in the preparation program takes a four-semester sequence of courses in her or his junior and senior years, with extensive field experiences that match content knowledge with appropriate instructional strategies.

In the first semester, students are introduced to foundational theories and knowledge about the processes of reading; the interrelation of goals, methods, and assessment linked to the principles of instruction; and the creation of a literate environment. In the second semester, students learn about children's and adolescent literature, reading and writing across the curriculum for meaning, and integrating themes for focused study. Students pursue topical area studies in educational psychology and mathematics methodology in the third semester, while continuing to develop their understanding of the processes of teaching reading. In their final semester of study, students take additional courses that deepen their understanding of the theoretical basis of reading instruction, assessment and the identification of reading difficulties, phonics strategies for word identification, and vocabulary and comprehension development. Throughout this sequence of courses and fieldwork, students continue to take liberal arts courses in their major as well as courses in educational technology, visual arts, music education, and the social foundations of education.

Like all outstanding programs, Hunter College's preparation program does not merely focus on coverage of content. Instead, teacher educators work with the preservice teachers in their classes on learning multiple instructional strategies for communicating what they have learned, preparing those teachers to use, adapt, and transform professional knowledge into the many challenging and unconventional situations they will face in classrooms.

Studies show that, without formal preparation in assessment methodology, beginning teachers struggle with translating diagnostic data into effective teaching strategies; with such preparation, those same teachers are able to pinpoint areas of concern and weaknesses in their own teaching and to provide multiple learning environments that meet the needs of all students (Kaste, 2001; Roskos & Walker, 1994; Shefelbine & Shiel, 1990; Wolf, Ballentine, & Hill, 2000; Wolf, Hill, & Ballentine, 1999; Xu, 2000a, 2000b).

The importance of this two-pronged approach toward student assessment and instructional adjustment becomes particularly clear when beginning teachers are given specific guidance in evaluating different reading strategies. They learn how to determine which approach will be most effective in a given situation. When they were taught how in-

structional decisions can be informed by evaluative diagnoses of student reading ability, beginning teachers were more effective at providing a learning environment that generated measurable gains in reading ability (Massey, 2003; Morgan, Gustafson, Hudson, & Salzberg, 1992).

Putting the Pieces Together

Researchers have found that the most successful programs follow the approach of organizing "pieces" of knowledge into overarching systems of study that faculty and students return to again and again. These broad principles—such as assessment-driven instruction, responsive and adaptive teaching, and explicit content delivery—make concrete the theoretical connections between content knowledge and classroom skills.

In the best programs studied, undergraduates learn about teaching reading by developing an integrated set of content knowledge and application skills that incorporates

- Conceptual understandings about the foundations of language development
- Proficiency with formal and informal assessment tools to determine readers' reading strengths and weaknesses
- Expertise with instructional strategies and materials for readers of all backgrounds and abilities

This kind of principled approach to developing content knowledge calls for visiting important topics repeatedly and building a depth of knowledge systematically throughout the course of study.

Moving Forward

Improving preparation programs for teachers of reading may require that they devote more time to reading methods, beyond the national average of six hours a semester, so that students can develop a depth of content knowledge. Many outstanding programs do go beyond six hours, and they never lose sight of the goal of linking content knowledge with classroom application.

Further, excellence in teacher education does not result from courses taken in random sequence. Improving the reading components of teacher preparation programs necessitates careful study and coordination of the topics covered by faculty in the prescribed course sequence. Several sites studied by IRA's Commission and its Teacher Education Task Force have systematically developed comprehensive matrices that spell out the content covered in each course and the links among courses. Additionally, study of the program curriculum in terms of standards for reading professionals should not be a one-time event, but rather an ongoing process that involves dialogue among faculty members.

Feature 2: Faculty and Teaching

RESEARCH FINDING

Exemplary programs that produce outstanding graduates have faculty members who are

committed to providing a sophisticated knowledge base and to modeling successful instructional techniques for their students.

The quality of the instruction provided is a critical factor in the success of preparation programs. Excellent programs go beyond delivering content and evaluating student learning with tests:

Excellence demands adopting a pedagogy that demonstrates and produces knowledge in action.

Teacher educators know that their students must be able to use what they learn to tackle the challenges of

today's classrooms. Teacher educators themselves model good teaching as they teach both theory and practice to undergraduates; they understand that the impact of coursework can be both profound and long lasting (Grisham, 2000; Lonberger, 1992).

In outstanding programs, faculty members assume the primary responsibility for teaching courses and supervising field experiences. The teaching faculty in such programs is largely comprised of individuals holding doctoral degrees in reading, language arts, or a closely related field, who have extensive experience in classroom teaching or in working as reading specialists or curriculum supervisors. They are committed educators, engaging in ongoing professional development, service, and scholarship in the field, and the tenure and promotion criteria at their universities take these aspects of their work into account. Teacher educators in excellent programs know more than the principles and practices most successful in reading instruction; they also model a command of content and pedagogical excellence. They are not merely masters of knowledge; they embody that knowledge as well.

We treat our students as we expect them to treat their students—as individuals with needs and expectations.

FACULTY MEMBER, UNIVERSITY OF SIOUX FALLS

Explicit Teaching

Preparation for reading instruction requires that teachers master a sophisticated body of knowledge and that they put this knowledge into action in classrooms. The IRA research efforts suggest that *explicit teaching* (Pearson & Gallagher, 1983) that includes clear explanation with good examples,

modeling, and extensive opportunities for practice is effective in producing beginning teachers who have and use necessary knowledge in classrooms. While not every situation calls for all three components of explicit teaching, the TETF review (Risko et al., in process) found a very strong relationship

Good teacher educators have mastered the gradual release of responsibility. They give good explanations, provide excellent models, and allow their students to practice, often in the protected environment of the university classroom and ultimately in highly structured and carefully supervised field settings.

RESEARCHER, NATIONAL
COMMISSION ON EXCELLENCE IN
ELEMENTARY TEACHER
PREPARATION FOR READING
INSTRUCTION

between effect strength and the number of components included.

Undergraduate students demonstrate real change in their own approach to teaching when the instruction they receive provides clear explanations of concepts and instructional practices using good examples. This includes presenting varied examples and counter-examples so preservice teachers are able to deduce the defining features of the approach under study—as well as juxtaposing examples that differ in many ways but are the same in others, and that provide opportunities for these un-

dergraduate students to apply their knowledge. The Commission study (IRA, 2003a) showed that within outstanding teacher education programs, faculty members structure the information they present around central concepts and ideas—and teach beginning teachers how to structure information for their students as well.

However, clear explanation is only one element of explicit instruction. Equally important is modeling diverse instructional formats using a wide range of materials. The best pedagogy in colleges of education no longer revolves around the twin poles of lecture and discussion. It incorporates alternative approaches, including case studies and multimedia materials, and demonstrates the strategies under study. Teacher educators in these programs never rely on a single method of instruction; they use multiple approaches to convey content (NICHD, 2000; Roberts & Hsu, 2000).

Underlying this approach to teaching is the belief that, in everything they do, faculty members are

consciously modeling outstanding pedagogical practices for their undergraduate students. Studies show that what beginning teachers learn is significantly increased when their teachers directly model the instructional format under investigation (Fox, 1994). Faculty members who consistently and repeatedly embody in their own teaching the kinds of diverse strategies they are presenting to their students are more effective than those who do not. By modeling a commitment to diverse and focused pedagogical strategies—and adopting a critical attitude toward their own teaching—these teacher educators produce graduates who are better equipped to provide creative classroom environments that stimulate learning (Stevens, 2002).

But a commitment to this kind of teaching goes beyond encouraging students to imitate their professors. True models are mentors who value what each individual brings to the learning context and who engage their students in opportunities to put theory into practice, helping teachers of all backgrounds apply what they are learning within new contexts (Risko, 1995; Wolf, Ballentine, & Hill, 2000; Wolf, Hill, & Ballentine, 1999). They create a learning environment that demonstrates their commitment to the education of each and every beginning teacher in the class and that actively supports the efforts of everyone. Just as they expect classroom teachers to find and build upon the strengths in each young reader, they demand the same of themselves with each of their undergraduate students. Such teachers intentionally create opportunities where their students can try out new strategies, ask questions about their instruction, and receive focused feedback that is both critical and constructive (Bean, 1997). Often they provide practice opportunities within the university classroom. These in-class opportunities are followed by observation and carefully structured and closely supervised field experiences.

Teacher educators gradually release responsibility as their students' competence grows (Pearson & Gallagher, 1983). They promote collaborative learning environments involving guided peer instruction, which research has shown effective in helping beginning teachers acquire, shape, and reinforce content (Mallette, Maheady, & Harper, 1999; Morgan et al., 1992; Nierstheimer, Hopkins, Dillon, & Schmitt, 2000). These professors en-

Faculty and Teaching in Action

At the University of Texas at Austin, careful planning and coordination of coursework and field experiences provide an optimal setting for explicit teaching and the gradual release of responsibility.

In a reading course, the professor demonstrates the use of literature circles by conducting literature circles at intervals throughout the semester, each time providing a different option for organizing them. First, the university students themselves choose particular books—sometimes books for children or adolescents, sometimes professional books, and sometimes adult trade books—to read and discuss. The circle discussions begin in different ways: choosing particular sections of a book to share with a group, having readers keep response journals and begin discussions by sharing a section from them, having students bring a question about the book to ask their classmates. The professor also models different ways to orchestrate the discussion and a variety of ways to end a literature circle.

Students have lots of opportunities to practice the use of literature circles in their university classes, but at the same time, they are engaged in field experiences where they observe classroom teachers conducting literature circles. Sometimes they assist the teacher and help with one of the circles. Finally, they have opportunities to run literature circles in their field placements. When they begin their student teaching, they are confident and competent to use literature circles to achieve their instructional goals.

Similarly, beginning teachers at Norfolk State University in Virginia spend significant time learning about children's and young adult literature and students' book choices in their reading coursework. Many of the teachers then have an opportunity to apply their learning by working in the Reading Partner's Clinic and participating in the Reading Is Fundamental (RIF) book distribution program. They learn about the literature and about students' interests and have chances to explore—first in coursework, then in activities in the university classroom, and finally in the field with RIF.

courage their students to reflect about their own beliefs regarding pedagogical practices while leading discussions regarding those beliefs. They help beginning teachers interpret the data they gather about the progress young readers are making so that they can adjust their teaching where necessary (Fox, 1994). By approaching their teaching role as “mentors who model,” these faculty members nurture the next generation of educators, who then follow the best practices they have learned and teach with a conscious awareness of their own crucial role in contributing to student learning (Leland, Harste, & Youssef, 1997).

Moving Forward

There is a need for broad implementation of best practices in undergraduate teaching. Faculty in

preparation programs often are pressured to emphasize skill and content acquisition by stakeholders who fail to recognize that these are merely means to the end (NICHD, 2000). Given these very real pressures and the limited time they have available in their courses, teacher educators sometimes lose sight of the myriad ways differentiated instruction can be implemented in their own classrooms, and they fall back on more traditional “one size fits all” approaches to instruction (Kaste, 2001; Walker & Ramseth, 1993; Wilson et al., 1993).

In order to address these concerns, teacher preparation programs must recruit and retain faculty who are committed to excellence, who keep abreast of the latest research in the field of reading education and in the area of instructional strategies. These teachers must work together to create

a program of study that not only informs undergraduate students about learning strategies for all kinds of readers but about appropriate assessment strategies, too—and they must model these practices in the university classroom (Briggs et al., 1998; Mallette, Kile, Smith, McKinney, & Readence, 2000). Faculty at outstanding programs constantly evaluate their own teaching—not only to determine whether the content they are teaching is understood by their students, but whether the students can effectively implement what they are learning.

Feature 3: Apprenticeships, Field Experiences, and Practica

RESEARCH FINDING

Excellent teacher education programs engage beginning teachers in a variety of field experiences in which they have opportunities to use their coursework and interact with excellent models and mentors.

Nearly every research study that has examined apprenticeships in teacher preparation programs emphasizes that student teaching and other field-based experiences are critical to developing expertise in future teachers. The value of field teaching is that it gives undergraduates practical experience in using their newly acquired knowledge and skills to assess student needs and to plan, organize, and manage lessons for reading.

The value of that experience is diminished considerably, however, if the fieldwork experienced by beginning teachers runs contrary to the knowledge base and instructional modeling they have received in the college classroom. Hence, outstanding preparation programs do not leave field placement to chance. The leaders of these programs pair their students with excellent practicing teachers who act

as models, and they situate them in classrooms that transcend the typical student-teaching scenario. They present beginning teachers with carefully arranged hands-on field experiences in reading instruction, including tutoring, diagnostic assessments, and small-group and whole-class instruction—all of which mirror and reinforce the coursework and preparation provided in the university setting.

Putting Learning Into Practice

Perhaps unsurprisingly, the best practices in instructing teachers—explicit explanation of the material, modeling thinking processes to produce active and engaged student learning, followed by multiple practice opportunities—turn out to be the best practices for K–12 classrooms. And just as pedagogy in preparation programs has moved beyond the traditional lecture and discussion format, so has classroom teaching in schools shifted to include multiple instructional formats. The best programs design their placement policies and procedures with this in mind. Teacher educators at these institutions know that the two factors most influential in determining the success of field experiences are exposure to classroom environments where explicit references to course and case content are made—to help beginning teachers apply the knowledge they have learned in their studies—and guidance from master teachers with explicit feedback to further learning during fieldwork (Maheady, Mallette, & Harper, 1996; Mallette et al., 1999). In fact, research shows that early exposure to a classroom environment that illustrates the material under study and where the teacher models appropriate instructional methodologies strongly affects the future effectiveness of teachers (Grisham, 2000; Lonberger, 1992). At the core of every outstanding apprenticeship program, then, is a commitment to provide a practical foundation for future teaching through field experiences that demonstrate proven, established, and successful strategies for teaching reading—and a mentoring relationship that involves regular debriefing of fieldwork activities for greater understanding and future effectiveness in the classroom (Clift & Brady, 2005; Fazio, 2000, 2003).

The fieldwork is so important. You can learn it, you can hear it, you can read it—but if you aren't experiencing it, it's not going to be the same.... You have to really be doing it to understand it.

BEGINNING TEACHER, GRADUATE OF
HUNTER COLLEGE

The basis for successful fieldwork is a close link with coursework. Excellent teacher education programs provide field opportunities for their undergraduates that are carefully crafted and closely supervised so that their students can experience how course content comes to life in the classroom (NICHD, 2000, pp. 15–16). For example, an intentional apprenticeship program would place a preservice teacher taking a course in comprehension instruction in a tutoring or other position where she or he had the opportunity to work with students to improve their reading comprehension using strategies under study in the college classroom. In this way, field experiences are strategically designed to reinforce practices and help beginning teachers become self-aware and intentional about their pedagogy. They trigger deeper reflection on the reasons behind use of a particular learning strategy in a particular context (Matanzo & Harris, 1999). As teachers move through an integrated program of study, they participate in field experiences that highlight the different aspects of literacy teaching they are learning about in the classroom. These experiences become more sophisticated, comprehensive, and demanding as students progress in their education, ensuring that beginning teachers are exposed to the full reading curriculum. Their growing knowledge base is buttressed with real-world applications of it in the classroom.

But teaching is not merely the process of applying the right content to the right situation—it's also about selecting the best available instructional approach and materials (Risko, 1995; Wolf, Ballentine, & Hill, 2000; Wolf, Hill, & Ballentine, 1999). In field experiences, beginning teachers learn how to make pedagogical theory come alive by being exposed to real students—not the hypothetical students of their methods textbooks. Field experiences provide an opportunity to couple understanding of material with the task of teaching it. Beginning teachers learn to use their understanding of which instructional formats and materials are best suited for the situation at hand. They gain first-hand knowledge of how to respond flexibly and opportunistically with the best approach for instructing individuals or groups of students (NICHD, 2000, p. 16).

To provide support every step of the way, educators in the placement classroom provide the guidance and feedback necessary to help student teachers learn how to turn their coursework into applicable strategies for teaching reading. Research shows that guided demonstrations in placement scenarios are a key factor in molding the approach teachers take in their own classrooms after graduation (Bean, 1997; Stevens, 2002). Hence, feedback in outstanding

placement programs means more than requiring apprentice teachers to go into classrooms and report back on what happened. It means explicit debriefing of what the student teacher saw during the placement and reflection about how that knowledge coupled with diagnostic data will shape future instruction (Leland et al., 1997). Professor feedback regarding learning logs, lesson plans, and dialogue journals has been shown to have an impact on student teaching. Peer coaching and collaboration also provide important avenues for students to explore their understanding of classroom pedagogy and to examine explicitly their practices and beliefs against their knowledge background (Anderson, Caswell, & Hayes, 1994; Mallette et al., 1999; Morgan et al., 1992).

Providing support to beginning teachers means opening up instructional spaces where they can ask questions and make multiple attempts with different instructional approaches. There must be a system of observations and guided feedback for undergraduates entering the classroom as student teachers (Mallette et al., 1999; Massey, 2003; Morgan et al., 1992). In sum, when students are provided the opportunity to debrief and process their fieldwork with seasoned and experienced teachers and university faculty, research shows that their pedagogy evolves to reflect an effective and objective methodological approach toward reading instruction (Levin, 1995; Morgan et al.).

I value the practicum that I had with [two teachers] because they were using the strategies I was learning and that was very helpful. Just being able to observe how the strategies were being used and also having the opportunity to try them.... I probably wouldn't have used some of them otherwise.

BEGINNING TEACHER, GRADUATE OF
THE UNIVERSITY OF SIOUX FALLS

Model Mentoring

The quality of the teaching models in field settings clearly influences what beginning teachers learn. The research literature indicates that placing students with ineffective models may lead them to ignore the content and strategies presented in their teacher preparation program, substituting instead the inefficient and ineffective practices they observe (Dowhower, 1990).

On the other hand, placing undergraduates in contact with classroom teachers who serve as excellent models of the vision and teaching philosophy of the teacher education program produces good results.

Outstanding reading education programs recognize that placement should be deliberate, not haphazard, if apprenticeships are to generate experiences that result in better teachers (Roskos & Walker, 1994; Shefelbine & Shiel, 1990). In such programs, the teacher edu-

cators responsible for fieldwork are actively involved in placing students into a systematic and integrated progression of classroom experiences—while simultaneously ensuring that the classroom teachers share the program’s vision and teaching philosophy and that they model effective teaching practices for undergraduates. Some programs work actively to develop the mentoring skills of cooperating teachers, while others recruit teachers who are program graduates—but every apprenticeship opportunity is rooted in supporting beginning teachers by providing exemplary modeling. The professionals they are shadowing in the classroom provide outstanding instruction to their students and therefore serve as templates for beginning teachers.

Researchers report that, without supportive and effective models, graduates of reading education programs are much less likely to use the instructional strategies they have been taught—or share them with their students (Bean, 1997; Dynak &

Smith, 1994). It is critical, then, that new teachers receive the appropriate instruction and have that reinforced in classroom settings with effective teachers who can guide them in applying their knowledge base (Risko, 1995; Wolf, Ballentine, & Hill, 2000; Wolf, Hill, & Ballentine, 1999). Good models are visibly intentional about how they teach; they provide clear demonstrations during field placements. They care deeply about improving instruction each and every day, and they trigger critical reflective moments by questioning closely the student teachers placed in their classrooms (Risko, Roskos, & Vukelich, 2002). In sum, they provide the structure and supervision necessary to produce the next generation of mentor models in the classroom.

Moving Forward

Apprenticeship experiences vary the contexts and roles in which undergraduates learn. The best teacher education programs offer extensive field experiences, consistent with the teacher education literature that calls for more and earlier field experiences. But the best programs also know that apprenticeships must be systematically developed, with undergraduates often requiring hundreds of hours of classroom experiences prior to student teaching. Without careful placement that links classroom learning with student teaching, studies show that the effectiveness of apprenticeship programs diminishes considerably (Irvine, 2001; Sleeter, 2001). Fieldwork placement therefore must be embedded in the narrative of the beginning teacher’s overall educational experience. Further, effective apprenticeship entails careful observation, honest critiquing, clear communication, and meaningful guidance. Beginning teachers will not become good teachers if feedback is limited to affirmation. Positive support by the supervising teacher and university faculty, then, takes the form of affirmation with direction (Mallette et al., 2000).

Finally, programs, like teachers, must subject themselves to critical assessments concerning how well their apprenticeship activities are meeting the needs of the students they serve, and make adjustments accordingly (Anderson et al., 1994).

One of the biggest turnarounds for our program came when I started taking personal responsibility for choosing the cooperating teachers carefully. I knew what we wanted our students to see, and now I don't leave it up to chance. I choose their teacher, and we follow the teacher.

FACULTY MEMBER, UNIVERSITY OF TEXAS AT AUSTIN

Apprenticeships in Action

At Indiana University in Bloomington, undergraduates conduct reading and writing conferences with students at three local elementary schools as part of an inquiry-based learning approach. With modeling and mentoring assistance, these preservice teachers investigate the strengths and weaknesses of each child with regard to reading ability. Then, they take active steps to institute an individualized program to reinforce positive strategies and provide the child with additional skills to develop fluency and comprehension.

At Florida International University, undergraduates learn about the writing process in class and then take a group of children through the process in a field experience. Part of this program includes conferences at which student teachers and children meet with parents to discuss progress in writing and share written work. The cooperating teacher sits in on the conferences and provides feedback to the beginning teacher, helping him negotiate the complex field of parent-child relationships and build an understanding of the connections between family and school literacy.

The University of Nevada at Reno carefully aligns the curriculum and field experiences for the reading components of its teacher preparation program with the International Reading Association's (2003b) *Standards for Reading Professionals*. Further, the College of Education collaborates with the university's College of Arts and Sciences, where future teachers are expected to take courses in such content areas as English, math, and science, and thereby develop content knowledge in other academic disciplines. The placement program then taps into the curricular background of undergraduates, linking them according to their particular interests and strengths to content area classrooms with teachers who model effective reading instruction strategies.

Feature 4: Diversity

RESEARCH FINDING

Excellent teacher education programs are successful in sensitizing their students to all forms of diversity.

Educators recognize that U.S. classrooms are becoming increasingly diverse, and classroom teachers see differences among students that run the gamut from concerns related to academic ability and learning styles to challenges regarding competence in English, language dialects, and differences in cultural backgrounds and experiences. In schools today, diversity is the norm, not the exception.

Effective teachers must respect and respond to these differences while they help children learn how to read. It is only through a shared vision strengthened by a communal sense of purpose that the best programs produce these effective

teachers, preparing them to meet the needs of diverse learners.

Cultural Diversity

The eight excellent programs studied by the IRA Commission shared a commitment to preparing graduates to reach readers with diverse backgrounds (IRA, 2003a). In these programs, administrators, faculty, and students agree that they must adapt and respond to the needs of readers as individuals. The administration does not simply react to student circumstances, but rather promotes active strategies that value diversity and differences; stronger programs are built because of this stance. The faculty uses the latest research to stress the importance of family narratives in developing literacy and makes connections between the instruction teachers provide in classrooms and children's home experiences (Clark & Medina, 2000; Foote

We have a lot of students with diverse backgrounds and unique experiences—coming to the United States and the community as foreigners. They know the immigrant experience, and they are successful. I want them to feel that they have something very valuable to pass on to their children. They can serve to inspire others.

FACULTY MEMBER, FLORIDA
INTERNATIONAL UNIVERSITY

& Linder, 2000; Kidd, Sanchez, & Thorp, 2000; Mottley & Telfer, 1997). They identify institutional practices and attitudes that might impede student learning, and they practice instructional methodologies that reach diverse populations in their own college classrooms (Wolf, Ballentine, & Hill, 2000; Wolf, Hill, & Ballentine, 1999). Beginning teachers take up the challenge as they reinforce these beliefs and approaches in their fieldwork: They intentionally make connections to

their students by engaging in discussions, and they critique these with faculty and peers (Mora & Grisham, 2001; Xu, 2000a, 2000b).

The end result of a commitment to reaching diverse learners is a program that instills in its graduates an abiding respect for the individuality of each child and a belief that everyone can learn to read if given the right instruction by the right teacher. Beginning teachers in excellent programs strive to be such teachers. With the guidance of administrators, faculty, and peers, they seek to make a difference in the lives of those they teach (Wolf, Carey, & Mieras, 1996a).

Exemplary programs take an active position around issues of diversity. For instance, the University of Texas at San Antonio responded to student and community needs with the creation of its downtown campus and literacy center (Keehn, Martinez, Harmon, Hedrick, Perez, & Steinmetz, 2003). The teaching faculty negotiated with city officials, identified a suitable location, and convinced university administrators that the plan would be valuable in preparing teachers for reading instruction. They targeted funds to support the center and solicited reading materials from publishers. Today, through the literacy center, the teacher preparation program is directly linked to public schools in the area and to the predominantly Mexican American population. The program's vision of preparing teachers to work with diverse

populations is realized in careful placement of students in field experiences, outreach to surrounding schools, and courses that address issues and topics of diversity. Through the literacy center, faculty members work collaboratively with local schools, helping them obtain funding, conduct staff development, and design, implement, and evaluate literacy programs.

Differentiating Instruction

A clear manifestation of a focus on diversity is a commitment to reaching struggling readers. The TETF review (Risko et al., in process) found that for novice teachers, acting as tutors for struggling readers was a powerful way to learn how to differentiate instruction. Teacher educators know that effective tutoring of struggling readers is a complex activity that requires a very high level of structured support. Despite the complexity, results are remarkable when beginning teachers are given that support.

Consider, for example, “deficit views” regarding struggling learners. Research has shown that such views on the part of teachers are among the greatest impediments struggling readers face. Findings in multiple studies have shown that eliminating this deficit mentality is critically tied to the guided instruction beginning teachers receive when working with struggling readers (Irvine, 2001; Mallette et al., 2000; Massey, 2003; Nierstheimer et al., 2000; Worthy & Patterson, 2001). Other studies have shown conclusively that maintaining the belief that struggling readers can be successfully taught how to read is linked to the relationships between future teachers and the mentors who instill such beliefs in them (Nierstheimer et al.). The intensity of the apprenticeship program is also a key ingredient in changing the outlook of beginning teachers (Massey, 2003; Nierstheimer et al., 2000; Worthy & Patterson, 2001). Reinforcing new beliefs with feedback from both the teacher and the student's peers is necessary to accomplish a transformation in outlook (Massey; Morgan et al., 1992; Roskos & Walker, 1994; Shefelbine & Shiel, 1990).

The focus on struggling readers in exemplary programs is strong. Researchers have found that the best instructional practices regarding the teach-

Diversity in Action

Florida International University is located in urban, multicultural Miami. Its College of Education, like the university as a whole, prepares students to succeed in this environment. Faculty members are committed to mentoring a diverse student body and nurturing a passion for teaching. They model pedagogy that is both engaging and rigorous.

The core curriculum for the first two years at the university includes a comparative cultures course, in which teachers in the college classroom expose undergraduates to a variety of ethnicities to promote respect for and understanding of diverse backgrounds. All education majors are required to take a course in teaching diverse populations, during which they study specific strategies and skills for implementing instruction that facilitates student learning. The elementary education program incorporates the teaching competencies developed by Teachers of English to Speakers of Other Languages, and requires two classes in methods specific to teaching second-language learners. Teacher educators in these courses use the latest research in second-language acquisition to provide in-depth instruction to beginning teachers. In addition to regular literacy classes, undergraduates also are offered explicit instruction in teaching exceptional students, during which they discover how to modify literacy lessons to meet the needs of advanced readers.

Faculty members at Florida International University offer a well-rounded education that gives teachers the opportunity to learn and practice reading education techniques effectively in a wide variety of contexts. Acting on the belief that students come first, the outstanding teachers at Florida International University constantly adapt instruction to the needs, interests, and strengths of their students—modeling precisely the kind of teaching they inspire in their graduates.

ing of children with learning differences mirror the principles articulated above—that is, it is necessary for the teacher to understand the challenges facing these learners and for both the student and the teacher to have high expectations that reading instruction will be successful (Massey, 2003; Shefelbine & Shiel, 1990). Compassion for these learners does not dictate lowered expectations—indeed, it often requires teachers to revise their preconceptions regarding what struggling readers are capable of (Irvine, 2001; Wolf, Carey, & Mieras, 1996b).

Teachers in preparation must apply their understanding of diagnostic tools to interpret the data they gather in order to offer appropriate differentiated instruction that adapts to individual student needs (Kaste, 2001; NICHD, 2000, p. 11; Roskos & Walker, 1994; Shefelbine & Shiel, 1990; Xu, 2000a, 2000b). By having high expectations of both themselves and their students, teachers learn the benefits of offering clearly articulated lessons with

vivid examples and of modeling the best practices in the field. As a result, they become not merely outstanding teachers, but genuine mentors to their students (Nierstheimer et al., 2000; Worthy & Patterson, 2001).

The support given to beginning teachers manifests itself in many forms. Teacher educators show support in how they value what each individual brings to the learning context. Just as they expect classroom teachers to find and build upon the strengths in each young reader, they work actively to find the strengths in each of their undergraduate students (Massey, 2003; Nierstheimer et al., 2000; Worthy & Patterson, 2001). Awareness of the diversity of the student body in reading education programs plays out in field placements, where undergraduates often work in schools that serve diverse populations. But it also means providing these students with specific, targeted feedback to help them make changes in their approach when necessary (Fazio, 2003; Grisham, 2000; Gupta,

My vision is for my students to become teachers who are able to look at a child as an individual and plan instruction accordingly.

FACULTY MEMBER, UNIVERSITY OF SIOUX FALLS

2004; Many et al., 1998; Matanzo & Harris, 1999; Wolf, Carey, & Mieras, 1996b).

Beginning teachers need to see how skilled mentors adjust instruction to meet the needs of students and how those adjustments are made using carefully interpreted diagnostic information (Grisham, 2000; Matanzo & Harris, 1999; Roskos & Walker, 1994; Shefelbine & Shiel, 1990; Wolf, Carey, & Mieras, 1996a).

Implementing those instructional strategies explicitly after seeing them modeled—and tracing the improvements in student learning as a result—has an enormous impact on beginning teachers' attitudes toward teaching struggling readers (Mallette et al., 2000; Nierstheimer et al., 2000; Worthy & Patterson, 2001). Study after study shows that teachers who initially had deficit views of struggling readers revised their views after undergoing a carefully supervised teaching experience.

Moving Forward

All children regardless of background or ability deserve the opportunity to flourish as readers, and research shows that an explicit, holistic, and integrated approach is essential for successful individualized instruction. Faculty in outstanding reading education programs are committed to modeling the strategies that reach struggling readers, as well as to mentoring teachers as they grow in their appreciation of the challenges and opportunities presented by today's diverse reading classrooms (Massey, 2003; Nierstheimer et al., 2000; Worthy & Patterson, 2001).

Feature 5: Candidate and Program Assessment

RESEARCH FINDING

Teacher educators at outstanding preparation programs intentionally and regularly assess their

students, their program, their graduates, and themselves, and use information gleaned from these assessments to guide instructional decision making and program development.

The focus on improving student achievement in the United States has spotlighted assessment—not just of students, but also of their teachers and the programs that produce them. The Commission research indicated that exemplary programs take thoughtful, creative, and integrated approaches toward assessment at all stages (IRA, 2003a). The intention is not merely to identify potentially good teachers, but to help improve the quality of current undergraduates, future classroom teachers, and faculty members themselves.

Multiple comprehensive measures, in addition to mandated external tests, should be used to assess students and programs—but the way the best programs use the assessment information is instructive. By paying systematic attention to assessments and using them in untraditional ways, excellent programs do not merely measure the quality of their students, teaching faculty, and curriculum. Instead, they strive to identify ways to improve every aspect of their programs. Assessments are not used as barriers to hold people back, but rather as diagnostic tools to help undergraduates and faculty improve their teaching and learning. By taking this stance, these programs model for beginning teachers the positive ways in which multiple forms of assessment, used on a continual basis, can inform program decisions and enhance teaching effectiveness.

Assessments That Work

Formal and informal assessments have a long tradition of use in reading education. Professional wisdom has embraced informal measures such as the reading inventory, checklists, and attitude surveys. In addition, reading has been a basic component of most standardized tests. With the current focus on accountability, assessment is critically important at district, state, and national levels. It has had a major impact on classrooms across the nation.

Assessment in Action

A student whose native language is Spanish entered the teacher preparation program at Florida International University after spending three years working and earning an associate's degree in arts at Miami-Dade Community College. Strictly by the numbers, Hortense's prospects were less than stellar: She had a GPA of 2.8, which she earned after taking remedial reading and math classes—high enough to meet the university's 2.5 GPA minimum, but hardly extraordinary. Although she easily passed all parts of the College Level Academic Skills Test required for students to transfer to state universities in Florida, her SAT score of 940 and ACT score of 17 put her below the university's requirements.

Florida International University uses a continuum of assessments to ensure academic accountability—and to give students like Hortense every opportunity to succeed. And Hortense was determined to succeed. In her application essay, she wrote movingly about her commitment to teaching and her volunteer work with children in her community, and she explained convincingly the journey she was on to reach her goal of becoming a teacher—including how she enrolled in several elementary education classes and had recently applied for both a substitute and teacher aide position in order to gain more experience and knowledge. The university and the College of Education saw her potential both as an educator and as a community member, and offered her provisional admission to the program.

Once admitted on a waiver, her academics began to improve, in no small part due to the feedback she received on assessments. Among those assessments was a culminating portfolio in which she collected samples of her work to demonstrate outcomes for each stage of her program, as well as her meeting of the Florida Department of Education's standards. These samples included lesson plans, written papers for assignments, reflections from classroom experiences, student work samples with her comments, and audio- and videotape of her own teaching. Not only did she demonstrate her success in the classroom, but she was able to reflect critically on her experience as both a teacher and a student.

After graduation her ties to the university were not cut, but strengthened. She was paired with a mentor in the master's program in reading education and attended graduate classes in reading instruction. She excelled in her student teaching and met state and national licensing standards, and is now seen as a model—not only of teaching excellence, but also of how an integrated assessment system can serve to identify talents and improve skills to produce an outstanding teacher. A faculty member at the university summed up her experience: "We have many students with diverse backgrounds and unique experiences...they know the immigrant experience, and they are successful. They have something very valuable to pass on...they can serve to inspire others."

In similar fashion, research shows that outstanding programs in teacher education for reading instruction consistently use a variety of assessments at multiple stages to evaluate student progress. In turn, the faculty members in these programs realize that measurements of student progress are also evaluations of the program and the faculty. A closer look at the various points at

which assessments occur reveals the dual function of student assessment and how both students and teachers benefit from an intentional focus on assessments that work.

Admission to the program. In keeping with the renewed emphasis on higher academic standards for future teachers, outstanding reading education pro-

Our program is changing constantly based on what we are learning from our experience with teacher preparation.... We have become open to a lot more data sources, and we have become a lot more systematic about studying ourselves.

FACULTY MEMBER, UNIVERSITY OF TEXAS AT SAN ANTONIO

grams all require minimum grade point averages (GPAs). But rather than relying only on numbers to tell the story, program directors gather a wealth of information on potential candidates, including essays and personal interviews. This extensive application process acts as a screening mechanism but also helps admissions officers uncover qualities of excellence that may not be revealed in

GPAs alone—and provides critical information to faculty about how to shape the program to respond to student needs that are not articulated through interpretation of grade scores alone.

Monitoring during the course of study. The best teacher preparation programs use tests and grades to assess their students' knowledge and skills in specific courses, but assessment strategies have evolved beyond a series of quizzes used to determine whether undergraduates have learned the material. Outstanding programs reflect this evolution. In addition to setting exams, these programs review student progress from a holistic point of view at critically determined stages—at the end of semesters, to be sure, but also during the term in the classroom and in field settings. Doing so allows teacher educators to judge the readiness of their students for the next stage of the program and to offer corrective feedback in a timely way so that students can make adjustments.

Assessments also serve as gauges of program success in meeting student needs: If students regularly struggle to meet a certain proficiency level, this points to a gap in program instruction that needs to be remedied.

Benchmarking achievement at graduation. The end of the program is almost always a critical assessment period, but research shows that, in the best programs, graduation is not simply perceived as a final measure of student achievement, but as a period for reflection on the program of study as a whole. The ability to discuss the preparation they

have received in a systematic fashion with potential employers is a vital interview skill for beginning teachers, and final evaluations that challenge students to look critically at their accomplishments within the program are enormously beneficial. Many exemplary programs require students to prepare final portfolios of their projects and progress. These portfolios serve job candidates well as they begin to search for a position in the education market, and they also serve as useful benchmarks for faculty within preparation programs, since any gaps they reveal prompt teacher educators to rethink the course of study and modify instruction accordingly.

Evaluating graduates in the teaching profession.

Once one class graduates, education programs typically shift their energies to the next group of undergraduates and do not track the effectiveness of their former students as they move into classrooms of their own (NICHD, 2000, p. 17). But the best programs realize that just as instruction must reach beyond the university setting to be effective, so too must the programs extend beyond graduation to continue the pursuit of excellence. Outstanding programs systematically collect data about the performance of their graduates in the workplace to evaluate their own effectiveness in preparing the next classes of future teachers. The teaching experiences of recent graduates provide critical information for program assessment, but program administrators' caring about what is happening to graduates also serves to sustain the sense of community built during the undergraduate years. Nurturing those relationships creates an alumni network that new graduates can tap into upon entering the job market. It also creates a ready pool of educators that faculty can access when they are seeking mentors for future fieldwork and speakers for informational sessions for current students.

Moving Forward

Outstanding programs put assessment at the forefront of their agenda. Assessment is critical because it reveals both the strengths and the weaknesses of a program, and recent research in using multiple assessments reveals opportunities for improving instruction that do not surface with-

out this focus. Other studies have revealed a lack of coherence between classroom content in preparation programs and the fieldwork performed by beginning teachers, leading programs to redouble their efforts at alignment (Wideen, Mayer-Smith, & Moon, 1998). Assessment is a critical component of an outstanding education program, and preservice teachers need to receive focused, intensive feedback about their own progress as well as instruction in how to measure the progress of their future students.

Feature 6: Governance, Resources, and Vision

RESEARCH FINDING

The mission of outstanding teacher education programs is to create and sustain programs centered on a vision of quality teaching that produces a community of future leaders in reading education. The governance system ensures that faculty are able to implement the vision.

Designers of outstanding reading components in teacher education programs consciously adopt a vision of the purpose and goals inherent in quality teacher education generally. These values are infused in the content, pedagogy, and direction of the program, and are embedded in the thinking, actions, and expectations of the program's administrators, faculty, and students, and the communities they serve. The educators in these programs know who they are, what they believe, and how to lead their programs to accomplish their goals by actively planning the realization of their vision. Their ambitions reflect a set of values that provides not only guidance, but also passion and energy to help educators maintain their focus in carrying out their mission. As leaders in reading education, administrators and faculty in outstanding programs take an active role in deciding how to make the best use of resources while seeking new avenues of support, knowing that adequate funding is critical for success. They enthusiastically encourage the professional development and scholarship of their faculty,

while channeling funds toward innovative curriculum development and clinical work.

But truly excellent teacher preparation requires a program that is more than the sum of its parts. The governance models at outstanding programs fully support the innovations of faculty while offering principled leadership that reflects the values of the program. And these values do not simply stay in the classroom: Faculty in exemplary programs work purposefully to integrate students, professors, classroom teachers, graduates, and the public they serve into a larger learning community. Students from these programs emerge having learned the value of participating in a comprehensive education plan. Their learning communities not only enhance their knowledge and instructional skills, but shape them into future role models for other educators.

It is the combination of values, mission, and community that constitute the overall vision of truly remarkable preparation programs and the graduates they produce (Hoffman et al., 2005; Maloch et al., 2003). A closer look at how these interrelated aspects of vision and governance are manifested reveals common themes found in all outstanding programs.

Valuing Education

While no two programs have exactly the same values, the commonalities among exemplary programs far outweigh the differences. Such programs have a core vision and message that is inherent in every course, shared among the faculty, and built into teaching and learning experiences throughout the program. Many of the programs share curricular features and operate from similar sources of professional knowledge. They see the beginning teacher as a facilitator who is being taught how to create a caring classroom environment that reaches all students by integrating the children's cultures, languages, and heritages into classroom instruction. While outstanding programs express these values differently, they all

We want teachers to be skilled, strategic, purposeful, reflective, creative, responsive, innovative—all of these are what we envision good teaching is.

FACULTY MEMBER, UNIVERSITY OF TEXAS AT AUSTIN

Governance, Resources, and Vision in Action

Indiana University/Purdue University in Indianapolis holds a vision of creating learner-centered environments in which children can pursue their own interests while being guided in their options and choices by teachers who have the very latest understanding of reading education. This vision emphasizes the social and personal nature of learning, wherein teachers are expected to develop the knowledge and skills they need to be advocates and leaders in promoting student opportunities to learn.

The program has done away with traditional course structures, opting instead for a model in which several professors teach their courses together, encouraging students to think holistically about their learning rather than to consider courses in isolation. It employs a cohort model in which groups of students progress with the same faculty director or team throughout the program. Community is emphasized by having the teacher development program centered at a local school, tapping the talents of cooperating teachers as well as students and faculty members. The program faculty takes responsibility for both undergraduate teacher preparation and the entire professional development program, playing a central and active role in governance at the school. The multifaceted approach to promoting shared values and accomplishing the mission demonstrates faculty members' wide-ranging commitment to a communal vision of excellence.

Norfolk State University in Virginia prepares teachers to teach in schools characterized by poverty and cultural change. The children in these schools often struggle to learn, but Norfolk State's teacher preparation program is driven by a "no excuses" vision: Teachers will not use students' poverty, family background, or cultural heritage as a pretext for their not learning to read. To the contrary, these conditions are seen by the faculty and students in the program as the very reasons why qualified teachers are essential.

As part of their commitment to reaching every student, Norfolk State University runs a Reading Partner's Clinic for K–6 children. Undergraduates screen and test children, observe tutoring sessions, and participate in special reading programs sponsored by the clinic, such as Read Across America and parent workshops. Students participate in the America Reads Challenge Project and the Reading Is Fundamental Free Book Distribution Project—initiatives sponsored by the university administration because they support the teacher preparation program. By extending the community to include families and the broader social institutions of the neighborhood, Norfolk State University's teacher preparation program demonstrates its integrated vision centered on values of community and of excellence regardless of background or socioeconomic status.

agree that teachers should serve learners and that outstanding teaching is measured by what students learn.

Two examples illustrate this point. The

We want our teachers to be instructional leaders and decision makers who are modeling good practices.

FACULTY MEMBER, HUNTER
COLLEGE

University of Sioux Falls in South Dakota is a Christian liberal arts college that highly values service to the wider community. The university supports this approach by evaluating, promoting, and awarding

tenure to faculty members based primarily on their teaching and contribution to the community.

While research is valued and reviewed, there is no "publish or perish" mindset. The department of education recognizes faculty service to students and others at the university, as well as contributions at the local, state, and national levels. The teacher education program at the University of Texas at Austin aligns its schedule not with the university but with the local public schools. Undergraduates start their fall semester in early August—a full three weeks before the university's fall schedule be-

gins—because that’s when K–12 schools open for the academic year. Students use the extra time to pursue field teaching until their university courses get underway. Though quite different in their substance, both examples illustrate how student learning is valued in the design and execution of the program.

Excellent programs also share common ground in the requirements they set for their students:

- They adapt to meet students’ needs by, for example, scheduling classes to accommodate those who are working their way through college or caring for families.
- They involve their students in decision making, from helping shape seminars of interest to identifying schools for their field experiences.
- They emphasize the value of each person through an inquiry-based approach to curriculum, instruction, and professional development, and the critical role each individual plays in his or her own education.

While not by any means an exhaustive list of program values, these all point in the same direction. Indeed, program visions capture what the “ideal” program looks like in their desire to embody and communicate these goals. Undergraduates are not left to make sense of competing visions or agendas. Instead, they are guided by well-qualified faculty in their development of a coherent understanding of teaching that they take with them into the workplace after graduation.

While the vision of exemplary programs clearly focuses on achieving noble goals, it is neither lofty nor esoteric. These programs are driven by a strong concept of the nature of quality literacy instruction that springs from research and is grounded in reality. Rather than producing students whose understanding of teaching is abstract and conceptual, these programs give students real-world knowledge and experience that translate into their becoming effective teachers. The vision they are given provides a framework they can draw upon when facing challenges in the classroom.

Finally, all the outstanding programs agree that governance and vision are not static. One of the key qualities of an effective program is that its governance evolves and changes. Vision is, by nature,

dynamic, responding to new insights from self-examination, research, and experiences—and encouraging bolder dreams of what could be.

Governing the Mission

Values are hollow if they are not put into action. The faculties in outstanding programs know that planning courses is only part of their role. Unless they set sail and navigate the waters (tumultuous at times) in order to achieve their goals, their graduates will be left behind. Hence, administrators of exemplary programs must see that there are sufficient resources to put plans into action. Faculty members in outstanding programs share a set of beliefs that they act on to make their vision a reality:

- They advocate for a fair share of the tuition, state funding, and special fees that their students generate.
- They take an active role in matching allocations to programs, including generating additional resources and making creative use of what is available.
- They target resources to support the development and enhancement of critical or new features of their programs.

I spend time in the schools and investing in the teachers so that the schools are ready for my undergraduates.... It is always about caring for them so that they, in turn, can care for our students.

FACULTY MEMBER, UNIVERSITY OF
SIOUX FALLS

For instance, when the state legislature in Florida determined that a teacher education program should incorporate 120 credit hours, teacher educators at Florida International University took action. Deciding that they wanted to require additional credit hours, they successfully petitioned the legislature for an increase beyond the mandated 120, and they have worked to find creative ways to support staff and to fund their ambitious program of study. In another instance, after participating in an exhaustive program review process, faculty at the University of Texas at San Antonio decided to increase the required semester hours in reading courses to 15 and fieldwork to 60 (Keehn et al., 2003). Both examples reflect creative solutions generated

by innovative thinking on the part of administrators and faculty.

Beyond the “nuts and bolts” of preparation programs, the governing administrative body in outstanding programs specifically and intentionally supports the faculty in the pursuit of excellence. This support comes in many forms: salaries commensurate with those of other faculty at the college

or university, teaching loads that recognize the time-intensive nature of courses in reading instruction, and funding for professional development. In these programs, expectations for faculty research and publication are realistic, as are faculty-to-student ratios, which reflect the demands of the program—especially in courses with intensive field-based experiences that require direct observation and meaningful feedback

for students. Classroom teachers are recognized, valued, and supported in tangible ways for their contributions to the program. In sum, faculty members take responsibility for program innovation, monitoring, and evaluation, and have discretionary control over a portion of the budget so they can respond to needs and opportunities as they arise.

Creating Community

The outstanding programs surveyed in the Commission research (IRA, 2003a) share a commitment to building sustainable communities of learning—at the program level and beyond. They are committed to intentionally forming small groups of students and faculty who work together throughout the program, linked by their mutual interest in reading education and their love of learning. These cohort groups are collaborative in nature, with all members sharing equal responsibility for the decisions and direction of the group. Out of these experiences beginning teachers and their teacher educators forge an identity from which they construct a shared standard of excellence for reading professionals (IRA, 2003a).

In the short term, learning communities provide an important support network for students and create a forum for faculty members to interact with students. But there are substantial long-term benefits as well. Collaboration is a powerful form of professional development for teachers, and learning communities in exemplary programs are intentionally designed to model professional inquiry, collaboration, and collegiality for undergraduates.

Outstanding programs take the view that collaboration is a skill that students must develop before they enter the teaching profession.

Undergraduates also develop their sense of identity as teachers in communities of learners. They learn the social norms, customs, and dispositions that characterize exemplary teachers through active participation in a cohort group—values that cannot be reduced to course content and transmitted in the classroom, but rather are modeled by mentors and peers. The path to teaching can be a lonely one, replete with intense demands, enlightening discoveries, buoyant successes, and dismal failures. Having a thoughtful community of like-minded peers and mentors with whom to share these experiences keeps undergraduates in teacher preparation programs on track; participating in a learning community moves undergraduates along a continuum toward developing their identity from students of teaching to teachers of students.

Moving Forward

Despite the professional folklore suggesting that teacher preparation does not have a discernible impact on beginning teachers, researchers consistently report that teacher preparation in programs with an integrated vision does indeed have a positive effect. Further, research shows a direct link between teaching practices and children’s learning (NICHD, 2000, pp. 7, 9, 14–15). But learning about instructional best practices and how to implement them does not occur in an institutional vacuum. Teacher education programs must advocate for the funding they need to achieve excellence and be creative in finding new sources of revenue if needed. Class sizes must be kept small, particularly in fieldwork situations where one-on-one attention produces the most notable gains. Salaries must be competitive to attract and retain highly accomplished faculty, and

I think the way our program was set up, with a cohort for collaboration as a learning community, was something I've found of huge value now that I've become a teacher. I'm in constant contact with them, and we still talk and plan and share.

BEGINNING TEACHER, GRADUATE OF INDIANA UNIVERSITY

teaching loads should be adjusted to recognize the time-intensive nature of courses in reading instruction. Governance needs to be integrated at all levels, to produce a coherent vision of the direction of the program.

At the same time, programs must stay at the forefront of the exciting research being done—not merely teaching it, but participating in it. Excellent programs must be cutting-edge laboratories for the next generation of research into reading instruction.

Conclusion

Effective preparation of teachers for America's classroom is essential to achieving our national aspirations. The International Reading Association has undertaken two major research initiatives to identify the features of effective teacher preparation. This synthesis of those initiatives describes six critical features that must be present to prepare teachers with the values, knowledge, practical skills, and reflective orientation required for their success. IRA encourages teacher education programs to use this document to examine their teacher preparation programs and to ensure that their graduates can teach reading well.

REFERENCES

- Alderman, M.K., Klein, R., Seeley, S.K., & Sanders, M. (1993). Metacognitive self-portraits: Preservice teachers as learners. *Reading Research and Instruction, 32*(2), 38–54.
- Anderson, N., Caswell, I., & Hayes, M. (1994). Using peer coaching to provide additional feedback to preservice teachers of reading in an early field experience. *Yearbook of the College Reading Association, 16*, 211–221.
- Bean, T.W. (1997). Preservice teachers' selection and use of content area literacy strategies. *Journal of Educational Research, 90*(3), 154–163.
- Boling, E.C. (2003). The transformation of instruction through technology: Promoting inclusive learning communities in teacher education courses. *Action in Teacher Education, 24*(4), 64–73.
- Briggs, C., Tully, B., & Stiefer, T. (1998). Direct informed assessment: Frequency of use in preservice teacher education programs within a five-state region. *Action in Teacher Education, 20*(3), 30–38.
- Clark, C., & Medina, C. (2000). How reading and writing literacy narratives affect pre-service teachers' understandings of literacy, pedagogy, and multiculturalism. *Journal of Teacher Education, 51*(1), 63–76.
- Clift, R.T., & Brady, P. (2005). Research on methods courses and field experiences. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the AERA panel on research and teacher education* (pp. 309–424). Mahwah, NJ: Erlbaum.
- Dowhower, S. (1990). Students' perceptions of early field experiences in reading. *Yearbook of the American Reading Forum, 10*, 163–179.
- Draper, M.C., Barksdale-Ladd, M.A., & Radencich, M.C. (2000). Reading and writing habits of preservice teachers. *Reading Horizons, 40*(3), 185–203.
- Dynak, J., & Smith, M.J. (1994). Summarization: Preservice teachers' abilities and instructional views. In C.K. Kinzer & D.J. Leu, Jr. (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (43rd yearbook of the National Reading Conference, pp. 387–393). Chicago: National Reading Conference.
- Fazio, M. (2000). Constructive comprehension and metacognitive strategy instruction in a field-based teacher education program. *Yearbook of the College Reading Association, 22*, 177–190.
- Fazio, M. (2003). Constructive comprehension and metacognitive strategy reading instruction in a field-based teacher education program: Effecting change in preservice and inservice teachers—Participant one. *Yearbook of the College Reading Association, 25*, 23–45.
- Fielding-Barnsley, R., & Purdie, N. (2005). Teachers' attitude to and knowledge of metalinguistics in the process of learning to read. *Asia-Pacific Journal of Teacher Education, 33*(1), 65–76.
- Foegen, A., Espin, C.A., Allinder, R.M., & Markell, M.A. (2001). Translating research into practice: Preservice teachers' beliefs about curriculum-based measurement. *Journal of Special Education, 34*, 226–236.
- Footo, M.M., & Linder, P.E. (2000). What they know and believe about family literacy: Preservice and mentor teachers respond and reflect. *Yearbook of the College Reading Association, 22*, 159–176.
- Fox, D.L. (1994). What is literature? Two preservice teachers' conceptions of literature and of the teaching of literature. In C.K. Kinzer & D.J. Leu, Jr. (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (43rd yearbook of the National Reading Conference, pp. 394–406). Chicago: National Reading Conference.
- Grisham, D.L. (2000). Connecting theoretical conceptions of reading to practice: A longitudinal study of elementary school teachers. *Reading Psychology, 21*(2), 145–170.
- Gupta, R. (2004). Old habits die hard: Literacy practices of pre-service teachers. *Journal of Education for Teaching, 30*(1), 67–78.
- Harmon, J., Hedrick, M., Martinez, M., Perez, B., Keehn, S., Fine, J.C., Eldridge, D., Flint, A.S., Littleton, D.M., Bryant-Shanklin, M., Loven, R., Assaf, L., & Sailors, M. (2001). Features of excellence of reading teacher preparation programs. In J.V. Hoffman, D.L. Schallert, C.M. Fairbanks, J. Worthy, & B. Maloch (Eds.), *Fiftieth yearbook of the*

- National Reading Conference* (pp. 262–274). Chicago: National Reading Conference.
- Hoffman, J.V., Roller, C., Maloch, B., Sailors, M., Duffy, G., Beretvas, S.N., & National Commission on Excellence in Elementary Teacher Preparation for Reading Instruction. (2005). Teachers' preparation to teach reading and their experiences and practices in the first three years of teaching. *The Elementary School Journal*, 105(3), 267–287
- International Reading Association. (2003a). *Prepared to make a difference: An executive summary of the National Commission on Excellence in Elementary Teacher Preparation for Reading Instruction*. Newark, DE: Author.
- International Reading Association. (2003b). *Standards for reading professionals—Revised 2003*. Newark, DE: Author.
- Irvine, J.J. (2001). *Caring, competent teachers in complex classrooms*. 41st Charles W. Hunt Lecture, presented at the 53rd Annual Meeting of the American Association of Colleges for Teacher Education, Dallas, TX.
- Kaste, J.A. (2001). Examining two preservice teachers' practices for promoting culturally responsive literacy in the middle grades. In J.V. Hoffman, D.L. Schallert, C.M. Fairbanks, J. Worthy, & B. Maloch (Eds.), *Fiftieth yearbook of the National Reading Conference* (pp. 311–322). Chicago: National Reading Conference.
- Keehn, S., Martinez, M., Harmon, J., Hedrick, W., Perez, B., & Steinmetz, L. (2003). Teacher preparation in reading: A case study of change in one university-based undergraduate program. In C.M. Fairbanks, J. Worthy, B. Maloch, J.V. Hoffman, & D.L. Schallert (Eds.), *Fifty-second yearbook of the National Reading Conference* (pp. 230–244). Chicago: National Reading Conference.
- Kidd, J.K., Sanchez, S.Y., & Thorp, E.K. (2000). Integrating language and literacy through projects: An applied internship experience. *Yearbook of the College Reading Association*, 22, 206–225.
- Leland, C.H., Harste, J.C., & Youssef, O. (1997). Teacher education and critical literacy. In C.K. Kinzer, K.A. Hinchman, & D.J. Leu, Jr. (Eds.), *Inquiries in literacy theory and practice* (46th yearbook of the National Reading Conference, pp. 385–396). Chicago, IL: National Reading Conference.
- Levin, B.B. (1995). Using the case method in teacher education: The role of discussion and experience in teachers' thinking about cases. *Teaching and Teacher Education*, 11, 63–79.
- Lonberger, R.B. (1992). The belief systems and instructional choices of preservice teachers. *Yearbook of the College Reading Association*, 14, 71–78.
- Maheady, L., Mallette, B., & Harper, G.F. (1996). The pair tutoring program: An early field-based experience to prepare preservice general educators to work with students with special learning needs. *Teacher Education and Special Education*, 19(4), 277–297.
- Mallette, B., Maheady, L., & Harper, G.F. (1999). The effects of reciprocal peer coaching on preservice general educators' instruction of students with special learning needs. *Teacher Education and Special Education*, 22(4), 201–216.
- Mallette, M.H., Kile, R.S., Smith, M.M., McKinney, M., & Readence, J.E. (2000). Constructing meaning about literacy difficulties: Preservice teachers beginning to think about pedagogy. *Teaching and Teacher Education*, 16(5–6), 593–612.
- Maloch, B., Flint, A.S., Eldridge, D., Harmon, J., Loven, R., Fine, J., Bryant-Shanklin, M., & Martinez, M. (2003). Understandings, beliefs, and reported decision making of first-year teachers from different reading teacher preparation programs. *The Elementary School Journal*, 103(5), 431–457.
- Many, J.E. Howard, F.M., & Hoge, P. (1998). Personal literacy and literature-based instruction: Exploring preservice teachers' view of themselves as readers. In T. Shanahan & F.V. Rodriguez-Brown (Eds.), *Forty-seventh yearbook of the National Reading Conference* (pp. 496–507). Chicago: National Reading Conference.
- Massey, D. (2003). Preservice teachers as tutors: Influences of tutoring on whole-class literacy instruction. In C.M. Fairbanks, J. Worthy, B. Maloch, J.V. Hoffman, & D.L. Schallert (Eds.), *Fifty-second yearbook of the National Reading Conference* (pp. 259–271). Chicago: National Reading Conference.
- Matanzo, J.B., & Harris, D.L. (1999). Encouraging metacognitive awareness in preservice literacy courses. *Yearbook of the College Reading Association*, 21, 201–225.
- Mora, J.K., & Grisham, D.L. (2001). ¡What deliches tortillas!: Preparing teachers for literacy instruction in linguistically diverse classrooms. *Teacher Education Quarterly*, 28(4), 51–70.
- Morgan, R.L., Gustafson, K.J., Hudson, P.J., & Salzberg, C.L. (1992). Peer coaching in a preservice special education program. *Teacher Education and Special Education*, 15(4), 249–258.
- Mottley, R., & Telfer, R. (1997). Storytelling to promote emergent literacy: Prospective teachers' storytelling experiences and expectations. *Yearbook of the American Reading Forum*, 17, 127–149.
- National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office.
- Nierstheimer, S.L., Hopkins, C.J., Dillon, D.R., & Schmitt, M.C. (2000). Preservice teachers' shifting beliefs about struggling literacy learners. *Reading Research and Instruction*, 40(1), 1–16.
- Pearson, P.D., & Gallagher, M.C. (1983). The instruction of reading comprehension. *Contemporary Educational Psychology*, 8(3), 317–344.
- Risko, V.J. (1992). Developing problem solving environments to prepare teachers for instruction of diverse learners. *Yearbook of the American Reading Forum*, 12, 1–13.
- Risko, V.J. (1995). Using videodisc-based cases to promote preservice teachers' problem solving and mental modeling. *Yearbook of the College Reading Association*, 17, 173–187.
- Risko, V.J., Peter, J.A., & McAllister, D. (1996). Conceptual changes: Preservice teachers' pathways to providing literacy instruction. *Yearbook of the College Reading Association*, 18, 104–119.

- Risko, V.J., Roller, C.M., Cummins, C., Bean, R., Block, C.C., Anders, P.L., & Flood, J. (in process). A critical review of the research on teacher preparation for reading instruction.
- Risko, V.J., Roskos, K., & Vukelich, C. (2002). Prospective teachers' reflection: Strategies, qualities, and perceptions in learning to teach reading. *Reading Research and Instruction, 41*(2), 149–176.
- Roberts, S.K., & Hsu, Y.-S. (2000). The tools of teacher education: Preservice teachers' use of technology to create instructional materials. *Journal of Technology and Teacher Education, 8*, 133–152.
- Roskos, K., & Walker, B. (1993). Preservice teachers' epistemology in the teaching of problem readers. In D.J. Leu, Jr., & C.K. Kinzer (Eds.), *Examining central issues in literacy research, theory, and practice* (42nd yearbook of the National Reading Conference, pp. 325–334). Chicago: National Reading Conference.
- Roskos, K., & Walker, B. (1994). An analysis of preservice teachers' pedagogical concepts in the teaching of problem readers. In C.K. Kinzer & D.J. Leu, Jr. (Eds.), *Multidimensional aspects of literacy research, theory, and practice* (43rd yearbook of the National Reading Conference, pp. 418–428). Chicago: National Reading Conference.
- Sheffelbine, J., & Shiel, G. (1990). Preservice teachers' schemata for a diagnostic framework in reading. *Reading Research and Instruction, 30*(1), 30–34.
- Sleeter, C. (2001). Epistemological diversity in research on preservice teacher preparation for historically underserved children. In W. Secada (Ed.), *Review of research in education* (Vol. 25, pp. 209–250). Washington, DC: American Educational Research Association.
- Stevens, L.P. (2002). Making the road by walking: The transition from content area literacy to adolescent literacy. *Reading Research and Instruction, 41*(3), 267–278.
- Tercanlioglu, L. (2001). Pre-service teachers as readers and future teachers of EFL reading. *TESL-EJ, 5*(3). [<http://tesl-ej.org/ej39/toc.html>]
- Traynelis-Yurek, E., & Strong, M.W. (2000). Preservice teachers' ability to determine miscues and comprehension response errors of elementary students. *Journal of Reading Education, 26*(1), 15–22.
- Walker, B.J., & Ramseth, C. (1993). Reflective practice confronts the complexities of teaching reading. *Yearbook of the College Reading Association, 15*, 171–177.
- Wham, M.A. (1993). The relationship between undergraduate course work and beliefs about reading instruction. *Journal of Research and Development in Education, 27*(1), 9–17.
- Wideen, M., Mayer-Smith, J., & Moon, B. (1998). A critical analysis of the research on learning to teach: Making the case for an ecological perspective on inquiry. *Review of Educational Research, 68*(2), 130–178.
- Wilson, E.K., Konopak, B.C., & Reardon, J.E. (1993). A case study of a preservice secondary social studies teacher's beliefs and practices about content-area reading. In D.J. Leu, Jr., & C.K. Kinzer (Eds.), *Examining central issues in literacy research, theory, and practice* (42nd yearbook of the National Reading Conference, pp. 335–343). Chicago: National Reading Conference.
- Wolf, S.A., Ballentine, D., & Hill, L.A. (2000). "Only connect!": Cross-cultural connections in the reading lives of preservice teachers and children. *Journal of Literacy Research, 32*, 533–569.
- Wolf, S.A., Carey, A.A., & Mieras, E.L. (1996a). The art of literary interpretation: Preservice teachers learning about the arts in language arts. In D.J. Leu, Jr., C.K. Kinzer, & K.A. Hinchman (Eds.), *Literacies for the 21st century: Research and practice* (45th yearbook of the National Reading Conference, pp. 447–460). Chicago: National Reading Conference.
- Wolf, S.A., Carey, A.A., & Mieras, E.L. (1996b). "What is this literachurch stuff anyway?": Preservice teachers' growth in understanding children's literary response. *Reading Research Quarterly, 31*, 130–157.
- Wolf, S.A., Hill, L., & Ballentine, D. (1999). Teaching on fished ground: Preparing preservice teachers for culturally conscious pedagogy. In T. Shanahan & F. Rodriguez-Brown (Eds.), *Forty-eighth yearbook of the National Reading Conference* (pp. 423–436). Chicago: National Reading Conference.
- Worthy, J., & Patterson, E. (2001). "I can't wait to see Carlos!": Preservice teachers, situated learning, and personal relationships with students. *Journal of Literacy Research, 33*, 303–344.
- Xu, S.H. (2000a). Preservice teachers in a literacy methods course consider issues of diversity. *Journal of Literacy Research, 32*, 505–531.
- Xu, S.H. (2000b). Preservice teachers integrate understandings of diversity into literacy instruction: An adaptation of the ABC's model. *Journal of Teacher Education, 51*(2), 135–142.

For more information on the International Reading Association and its initiatives in teacher education, contact pubinfo@reading.org or visit the Association's website at www.reading.org. Copies of this research synthesis can be downloaded from the website's "Focus on Teacher Education," at www.reading.org/resources/issues/focus_teacher_education.html.