The kindergarten teacher repeats a sentence children have just generated, “Today we will read a book about lizards.” She draws eight lines on a dry erase board, saying each word of the message. As she starts to write on the first line, she asks if anyone knows how to spell “today.” Monica volunteers that the word “today” has the word “to” in it, so it should start with the letters “t” and “o.” Scotty adds that this word ends with “da.” The teacher writes these letters on the line and adds “y” to the end. She then reads the word, pointing at it, and moves to the next line. “What word should we

McREL’s scaffolding program heads off literacy problems by introducing strategies for preschool and kindergarten classrooms.

Children build skills as they learn to recognize letters in various forms.

Kindergartners in Iowa build skills for literacy and other academic competencies as they play clerk and store customer.

BY ELENA BODROVA, DEBORAH J. LEONG, JENNIFER S. NORFORD, AND DIANE E. PAYNTER

It only looks like child’s play

The kindergarten teacher repeats a sentence children have just generated, “Today we will read a book about lizards.” She draws eight lines on a dry erase board, saying each word of the message. As she starts to write on the first line, she asks if anyone knows how to spell “today.” Monica volunteers that the word “today” has the word “to” in it, so it should start with the letters “t” and “o.” Scotty adds that this word ends with “da.” The teacher writes these letters on the line and adds “y” to the end. She then reads the word, pointing at it, and moves to the next line. “What word should we
write on this line?” she asks. In response, several children hold up their individual dry erase boards and show their sentences. All of them have lines marking the space for each word, and some have already written the words on the lines. As the class watches the teacher writing the word “we,” children check whether they have this word written correctly and in the right place in the sentence.

Meanwhile, five teachers sit at the back of the room and take notes. When the teacher tells the children to write another sentence about lizards on their boards, the visitors stand to watch. When the demonstrating teacher approaches, they start asking questions. “Do you usually model only one sentence at a time?” “I wish my children were able to write on their own. How do you do this?”

These teachers are a part of a professional learning program for early childhood educators that helps teachers understand literacy theory and use their knowledge to make sure every child learns. Scaffolding Early Literacy, based on the educational theories of Russian psychologist Lev Vygotsky, emphasizes providing pre-kindergarten and kindergartners with appropriate support as they master new skills (Bodrova, Leong, Paynter, & Hughes, 2001; see also Bodrova & Leong, 1996; Wood, Bruner, & Ross, 1976). When early childhood educators use appropriate scaffolding, even at-risk children succeed in school.

Classes using the program are closing the achievement gap between higher-performing students and minorities, those with special needs, and children from poorer households (see box on page 50). In one Iowa kindergarten model classroom in which more than 40% of students were designated as having a special need, every child met the literacy standard and none will require special intervention going into 1st grade.

“From the first day of school, my new crop of 1st graders has shown more confidence in their writing abilities compared to previous classes,” said Mary Mulvihill, a 1st-grade teacher. “Starting with a good background in sound-symbol relationships, they came with several strategies for reading and writing, including stretching out words and writing the sounds they heard.”

Over the past six years, the program has grown from a handful of A kindergarten teacher draws a tulip on a dry erase board in a Graphic Practice exercise. When children practice making letter elements outside of literacy activities, it takes frustration out of their early writing attempts.

A MULTIFACETED PROGRAM

Scaffolding Early Literacy was developed by Mid-continent Research for Education and Learning (McREL), one of 10 regional laboratories sponsored by the U.S. Department of Education. The program offers professional services and resources to develop children’s cognition, language, and early literacy in preschool and kindergarten (Bodrova & Leong, 2001; Killion, 2002). It includes:

- An early literacy curriculum;
- A distinct instructional approach;
- A diagnostic-prescriptive assessment system; and
- A professional learning program.

Curriculum

The Scaffolding Early Literacy curriculum stresses academic, social, and emotional development. It provides both play and direct instruction and is based on research showing that young children’s emotional development and academic learning are closely intertwined (Raver & Knitzer, 2002; Shonkoff & Phillips, 2000).

Approach and strategies

The instructional approach features specific instructional strategies, a room arrangement, scheduling, distinct activities and materials, and classroom assessments, all based on seven interrelated principles (see box on page 49). Each student activity is aimed at developing more than one skill or concept to integrate different subjects, such as early literacy and mathematics. And, instead of focusing on one area at a time as many activities for young children do, the activities stress using the content to develop other cognitive, linguistic, or social skills. For example, rather than
drilling children on writing letters, teachers use a daily sign-in sheet to have them learn to write their own names. The children develop a sense of responsibility in addition to writing skills.

**Assessment**

The Early Literacy Advisor™ (ELA) is a computerized system that helps teachers identify literacy skills in 4- to 6-year-olds, including their ability to recognize letters, connect sounds to symbols, and use print conventions such as tracking sentences from left to right. The child’s ELA profile shows the child’s current literacy level and suggests research-based teaching strategies that match each one’s strengths and needs. The ELA helps teachers customize their instruction and deepen their understanding of literacy development (see www.mcrel.org/resources/literacy/ela/).

**Professional learning**

To effectively use Scaffolding Early Literacy, teachers must understand how and when children’s development allows them to learn the skills they need to develop literacy. Some research indicates that traditional, one-time workshops — or even longer sessions over the course of a year — do not change teachers’ practice long term. McREL uses a combination of daylong sessions, observations in model classroom, and ongoing coaching and support from a professional development provider to help teachers change their practices. In the AEA, teachers meet every other month for extended study and collaboration, in addition to about five days each year allocated for professional learning experiences.

**MODELING AND MORE**

The Mississippi Bend Area Education Agency became involved in Scaffolding Early Literacy after hearing a McREL presentation. The AEA agreed to pilot the program in 2000 in 18 of its 22 districts.

Initially, more than 70 kindergarten teachers from the region attended three daylong workshops to learn content, research-based teaching strategies, and assessments. The first day covered the program’s Vygotsky-based theory, focusing on the “zone of proximal development,” the difference between what a child can do independently and what the child can accomplish with the teacher’s help (Vygotsky, 1978). The consultant used videos and small group breakout sessions to talk about this and other new concepts. On the second day, participants explored strategies for teaching literacy, particularly Scaffolded Writing. When children are excited about their ability to write, many other literacy strategies fall into place. Teachers then used the strategies in their own classes to get student work samples. On the workshop’s third day, teachers shared and discussed the Scaffolded Writing approach, using the student samples.

The consultant also suggested ways to set up classroom centers. For example, teachers learned that centers in a preschool classroom should be physically marked by different-colored signs with the name of the center and an icon, such as a book for the literacy center or a paintbrush for the art center.

After the workshops concluded, McREL faced a problem. The AEA’s size made it difficult and costly to bring together large groups of teachers for follow-up. So the AEA chose two teachers, based on school location and leadership support, whose classrooms became regional demonstration sites. The kindergarten classrooms also were chosen to represent the AEA’s diverse student population: One had more than 40% special needs children, and the other had primarily second-language learners.

The two model classroom teachers, district-level curriculum directors, and AEA staff members visited Colorado pilot classrooms at different times of the year to observe students and teachers in an established classroom using the literacy strategies.

In addition, the McREL consultant visited the two Iowa model classroom teachers for two or three days every other month to work with them individually and help them extend and refine the teaching strategies they had learned. The consultant observed

---

**Seven principles**

Scaffolding Early Literacy is based on a theoretical approach to teaching and learning that evolved from educational theories of Russian psychologist Lev Vygotsky. Seven underlying principles state that instruction in the preschool classroom should:

1. **Meet the child’s learning and development needs;**
2. **Support the child in constructing knowledge through social interactions;**
3. **Amplify development rather than accelerate it;**
4. **Consider development as a continuum of behaviors rather than as a single point on a scale;**
5. **Scaffold children from assisted performance to independent performance;**
6. **Engage students in activities that lead to developmental accomplishments; and**
7. **Use student assessment data to shape instruction.**
and coached the teachers, and modeled new strategies. The teachers tried different activities to help students learn phonological awareness, print concepts, the alphabet, and the uses of reading and writing. The activities also were meant to develop students’ foundation skills, such as being able to control one’s social and learning behaviors, to pay attention and to remember on purpose, and to use symbols.

On some days, the consultant worked with both teachers, and they shared their successes and problems with implementing the program. They used journals to reflect on how and what they learned. All of this work helped prepare the model classroom teachers to mentor and instruct teachers in neighboring classrooms and districts.

Visiting teachers observed in the model classrooms when the McREL consultant demonstrated teaching strategies, as well as at times with the regular classroom teachers. The observing teachers were able to see different ways to accomplish the program’s goals and adapt the strategies to work best in their own situations. Teachers answered questions such as, “What’s different about the calendar in this classroom?” or “How does group time in this classroom compare with group time in your class?” Visiting teachers asked about specific activities they observed and about ways to make the activities work in their own classrooms. They witnessed how to teach Scaffolded Writing, have students plan for play, or set up a center to allow for individual and small group time.

As the model teachers became more knowledgeable and skilled, they answered questions and worked with the visiting teachers on solutions for their own classrooms. Over a nine-month period, 53 of about 70 teachers who were initially trained visited the model classrooms.

**Scaffolding data**

Students in Scaffolding classrooms in the Mississippi Bend Area Education Agency districts scored significantly higher in 2000-01 and 2001-02 than students in nonparticipating classrooms on assessments of letter identification, sound-to-symbol correspondence, instant word recognition, and reading concepts.

From October 2000 to May 2001, overall student achievement increased 56% in letter identification, 60% in sound-to-symbol correspondence, 70% in instant word recognition, and 54% in reading concepts.

Students with low socioeconomic status showed the following gains:

**Visual letter recognition**

- **October 2001:** About 33% of low socioeconomic status students knew 25% or fewer of their letters.
- **May 2002:** About 86% of low socioeconomic status students knew 75% or more of their letters.

**Sound-to-symbol correspondence**

- **October 2001:** About 45% of low socioeconomic status students scored in the 26% to 50% range.
- **May 2002:** About 87% of low socioeconomic status students scored 80% or higher.

**Instant word recognition**

- **October 2001:** About 93% of low socioeconomic status students knew 5 or fewer words when tested for instant word recognition.
- **May 2002:** About 52% of low socioeconomic status students knew 20 or more words, and only around 21% remained in the 5 words or less range.

**Reading concepts**

- **October 2001:** About 33% of low socioeconomic status students scored 25% or less.
- **May 2002:** About 85% of low socioeconomic status students scored 76% or higher.

Model classrooms have become one of the program’s key components. Model classrooms, established either regionally or within a district, give teachers opportunities to observe lessons and discuss their own practices in small group settings. The model classrooms offer what we know works in professional learning: expert mentors and a connection between theory and practice that is best achieved by combining research with hands-on experience. (McRobbie, 2000; see also WestEd, 2002; National Staff Development Council, 2001; Collins, 2000; Peixotto & Fager, 1998).

Additional support came from a virtual workshop where teachers interacted with the consultant and each other. Over two school years, teachers implementing the program took part in 11 distant learning sessions offered through Iowa Community Network. Each session focused on one key area the program targeted, such as phonological awareness, dramatic play, or self-regulation. The ICN sessions began with a short presentation by a staff development provider, then allowed participating teachers to share...
examples from their own classrooms and ask questions. Teachers saw samples of student work, slides, and videotapes of classroom activities, and they said seeing actual student work and teacher practice helped them better understand their own implementation of the strategies.

School and district-level leadership also were pivotal to the program’s success. School and district leaders attended training sessions along with teachers, met with the McREL consultant for briefings, and visited the model classrooms. One district’s curriculum director and the principal of the building with the model classroom participated in a learning team about standards for primary reading. The administration allowed both teachers in the model classrooms greater autonomy and flexibility in dealing with the district curriculum and daily schedule.

“My curriculum director was involved in every step of the training, which made her suggestions and insights invaluable,” said Sheri Wallace, a model classroom teacher at Edward White Elementary in Eldridge, Iowa.

And as word about the model classrooms spread in the Mississippi Bend Area, 1st- and even 2nd-grade teachers became interested in the different methods — clearly seeing their applicability with older students.

LESSONS LEARNED

Early childhood teachers with many years of experience can create a warm, loving atmosphere in their classrooms, yet not be able to ensure that children will get a strong start in literacy. Integrating new teaching techniques and knowledge of how to promote literacy in the classroom can help teachers foster greater student success. Teaching teachers to determine when a young child is ready to learn and the appropriate teaching strategies for that point in time are critical to helping teachers improve student achievement in early literacy.

REFERENCES


Additional resources