Chapter 7
Early Prevention Initiatives

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After reading this chapter, you should be able to:
● Provide a definition of school readiness
● Describe the preventive intervention approach

For some time, educators have known that children who grow up in poverty often experience delays in cognitive and social-emotional development (Lengua, 2002). Many start school unprepared for the academic and behavioral demands of the elementary classroom, causing an achievement gap that widens over time (Zill et al., 2003). Compared with national norms, rates of serious learning problems, underachievement, and school dropout are much higher among socioeconomically disadvantaged and ethnic minority students than among their more advantaged peers (Ryan, Fauth, & Brooks-Gunn, 2006). The Children’s Defense Fund reported in 2005 that the number of United States children living in poverty had grown by 11.3% to approximately 13 million, or 1 in 5 children. By the beginning of 2011, the number of poor children in the United States was over 14.6 million (Children’s Defense Fund, 2011). The promotion of school readiness continues to be a national priority.

Head Start has been referred to as the nation’s “premier” federally sponsored early childhood education program, developed to reduce socioeconomic disparities in educational attainment (U.S. Department of Health and Human Services [USDHHS], 2001). The national investment in Head Start programs was based on research showing that high-quality preschool programs can substantially improve the school adaptation and life course of disadvantaged children, enhancing their academic achievement, high school graduation rates, and long-term employment opportunities (Barnett, 1995; Weikart & Schweinhart, 1997). Yet, significant delays in school readiness remain evident, even for children who participate in Head Start. The recent Head Start Impact Study, which compared children randomly assigned to receive Head Start with a similar group allowed to enroll in community non–Head Start services, demonstrated significant benefits, particularly on cognitive skills (U.S. Department of Health and Human Services, 2005). However,
no effects were found on several important aspects of school readiness, including oral comprehension skills, phonological awareness, aggressive behaviors, or social skills.

In an effort to reduce the achievement gap associated with socioeconomic disadvantage, preventive interventions are being developed to strengthen the impact of Head Start and other prekindergarten programs on the school readiness of at-risk children.

**A Definition of School Readiness**

Preventive interventions are most effective when they are based on developmental research (Coie et al., 1993). We define *school readiness* as the prekindergarten child characteristics and skills that have predicted positive academic and behavioral adjustment to school in longitudinal studies. These skills represent “protective factors” to be targeted in preventive intervention because they promote child resiliency in the face of disadvantageous life circumstances. A central focus of this chapter is on the social-emotional and self-regulatory skills that set the stage for learning at school, including the abilities to establish positive relationships with teachers and peers, focus and sustain attention in learning tasks, cooperate and participate effectively in the classroom, and inhibit aggressive reactions.

**Social-Emotional and Self-Regulatory Skills**

As preschool children transition into kindergarten, they face heightened demands for self-regulation and social integration. They are expected to initiate and sustain positive relationships with teachers and peers, listen and learn on demand, follow classroom rules and routines, and in general, show appropriate self-regulation, independence, and initiative in the classroom (Rimm-Kaufman, Pianta, & Cox, 2000). School readiness is enhanced by four interrelated social-emotional skills: (1) prosocial-cooperative skills, (2) emotional understanding and emotion regulation, (3) self-control and attentional focus, and (4) social problem-solving skills.

Prosocial-cooperative skills include the social skills that support friendships (e.g., being friendly and agreeable, sharing, helping) and the collaborative skills that support positive engagement in learning activities at school (e.g., following teacher directions, respecting classroom rules and routines, and working well in a group). Children who enter elementary school with higher levels of prosocial-cooperative skills learn more quickly at school and attain higher rates of achievement over the course of kindergarten than do students with lower levels of prosocial skill readiness (Ladd, Buhs, & Seid, 2000). Prosocial students also establish better relationships with both teachers and peers and enjoy rich, collaborative, peer play experiences (Denham & Burton, 2004; Fantuzzo et al., 2007). Conversely, low rates of prosocial skill at school entry predict social isolation, behavior problems, and peer difficulties in later school years (Bierman, 2004).

Emotional understanding includes knowledge about emotions and the abilities to accurately identify emotional expressions in someone else, to identify one’s own emotional states, and to recognize events that are likely to elicit par-
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Learning how to control aggressive impulses is particularly important. In general, aggressive behavior is not uncommon when children first enter preschool and attempt to play with others (ages 2–3). Normatively, however, rates of aggression decrease sharply during the preschool years, as children develop the verbal, emotional, and social skills that allow them to inhibit their first impulses, comply with social rules, and use words (rather than aggressive actions) to voice dissatisfaction and resolve disagreements (Denham & Burton, 2004). Children who continue to show high rates of aggression in prekindergarten and who carry aggressive behaviors over into elementary school are at high risk for stable and escalating conflicts with teachers and peers that undermine their school learning and adjustment (Bierman & Erath, 2006).

During preschool, social problem-solving skills emerge, which enable children to use their verbal skills to identify problems, generate alternative solutions, and negotiate with their peers, fostering nonaggressive conflict management (Dodge, Bates, & Pettit, 1990). Strong social problem-solving skills in preschool anticipate positive social adjustment later in elementary school. For example, in one study, Dodge et al. (1990) asked prekindergarten children to explain how they would respond to a set of typical conflicts (e.g., a child who wanted to swing when someone was already on the only available swing). Children who could generate several ideas about how to get a turn appropriately (e.g., without using aggression) were more likely to gain peer acceptance when they entered grade school. Children who generated few ideas and relied on aggressive solutions tended to show higher levels of aggressive behavior and develop peer problems in grade school.

Language Skills and a Foundation for Literacy

The term oral language skills refers to the child’s ability to understand and produce single words,
grammatically varied utterances, and oral narratives. In the long term, oral language skills provide critical support for school adjustment. They provide a foundation for interpersonal understanding, and they enhance reading comprehension. Effective communication skills also foster the child’s ability to comply with classroom rules, follow teacher directions, and establish positive peer relations at school entry (Bierman & Erath, 2006; Dickinson & Brady, 2006). The development of social-emotional skills and language skills influence each other; together, they affect school readiness in critical ways. Learning is sometimes conceptualized as the acquisition of domain-specific content, along with the development or construction of new ways of thinking about that acquired knowledge (Edwards, 1999). The development of school readiness skills is different and cannot accurately be characterized in terms of the isolated acquisition of discrete skill sets (Blair, 2002). Rather, the social-emotional and language skills just described are intertwined developmentally. Language skills enhance the child’s capacity to regulate emotions and promote effective social interaction (Greenberg & Kusche, 1998). Conversely, social-emotional competencies foster positive adult and peer relationships, motivating and providing important opportunities for language learning and cognitive development (Bierman, Greenberg, & Conduct Problems Prevention Group, 1996). Together, language and social-emotional competencies support engagement in school, promoting the child’s ability to follow classroom rules, cope actively with learning challenges, and relate effectively to teachers and peers (McClelland et al., 2006).

Preventive interventions designed to foster school readiness typically target one or more of the four social-emotional skill sets just described, attempting to strengthen the “protective factors” of prosocial-cooperative skills, emotional understanding, self-control and attentional focus, and social problem-solving skills. Increasingly, a focus on promoting language and preliteracy skills is also being integrated into social-emotional learning interventions.

THE PREVENTIVE INTERVENTION APPROACH

A number of prekindergarten interventions have been developed to foster social-emotional development and enhance child self-regulation skills. Many have demonstrated success in promoting school readiness skills, both by using new curricula and by training teachers in specific teaching strategies. The “first-generation” social-emotional learning programs were designed as stand-alone programs. More recently, however, comprehensive prevention programs are emerging, designed to integrate social-emotional learning components with intervention strategies targeting children’s oral language and emergent literacy skills. In the following sections, we briefly review an array of preventive interventions targeting the promotion of social-emotional development and behavioral school readiness during the prekindergarten year (see also Denham & Weissberg, 2004). Then, we illustrate a prevention program that integrates social-emotional learning with prevention components targeting language and emergent literacy skill development.

Universal Classroom Interventions

A rapidly growing research base suggests that the skills that make up social competence during the preschool years (e.g., cooperative play skills, emotional understanding, self-control, and social problem-solving skills) can be promoted with instructional approaches applied in school settings (Denham & Weissberg, 2004; Elias et al., 1997). The instructional process consists of three central components (Mize & Ladd, 1990). First, lessons use modeling stories, puppets, and pictures to illustrate skill concepts and to explain, demon-
strate, and discuss the skill. Second, children are provided with multiple opportunities to practice skills with guidance and support, such as in the use of role-plays, games, and cooperative activities. Third, teachers provide reinforcement for the use of the skills, praising skill use, redirecting problem behavior by suggesting skill use, and commenting on the positive consequences of skill use. They also look for opportunities to cue and support the use of skillful strategies in “real-life” situations that occur in the classroom throughout the day.

Teacher-led curriculum-based programs are termed universal when they are used by a classroom teacher to enhance the language skills and social-emotional competencies of all children in the classroom (Weissberg & Greenberg, 1998). During the preschool years, teacher-led classroom prevention programs may be particularly effective. Teacher–child relationships and interactions provide a primary context for social-emotional development and learning. Teachers are critical sources of support and socialization for young children and influence social-emotional learning in both formal and informal ways (Pianta, 1999). Teachers who are sensitive, warm, and responsive foster children’s feelings of emotional security in the classroom. This security promotes children’s comfort in exploring their physical and social worlds; it enhances their ability to interact comfortably with other children and concentrate on learning tasks (Rimm-Kaufman et al., 2002). Teachers who set up clear routines, establish appropriate classroom rules, and help children manage conflicts with discussion and problem solving foster the development of child self-regulation skills and their ability to inhibit aggressive reactions (Denham & Burton, 2004; Webster-Stratton, Mihalic et al., 2001). Training teachers to provide warm support and effective (nonpunitive) classroom management has positive effects on children’s prosocial behavior and reduced aggression (Webster-Stratton, Reid, & Hammond, 2001).

In addition, teachers can foster social-emotional learning through the use of explicit curricula and teaching strategies. A rapidly growing research base suggests that social-emotional skill development can also be enhanced via the use of systematic instructional approaches in the classroom (Consortium on the School-Based Promotion of Social Competence, 1994; Elias et al., 1997).

**I Can Problem Solve (ICPS) Program.** One of the first universal social-emotional learning programs designed specifically for preschool children was the I Can Problem Solve, or ICPS, program (Shure, 1992; Shure & Spivack, 1982). This preschool curriculum includes skill presentation lessons and guided practice activities, which use pictures, role-playing, puppets, and group interaction to teach social skills associated with understanding emotion and social problem solving. During the first 10 to 12 lessons, children learn word concepts to help them describe social sequences (e.g., *some* vs. *all*, *if/then*, *same/different*). The second unit (composed of 20 lessons) focuses on identifying one’s own feelings and recognizing the feelings of others. Students practice identifying people’s feelings in problem situations and are shown how behaviors can affect others’ feelings and responses. In the third set of 15 lessons, teachers use role-playing games and dialogue to promote social problem-solving skills. Teachers introduce hypothetical problem situations that commonly occur in preschool settings and ask children to generate and act out possible solutions as ways to encourage generative thinking and help children understand the consequences linked with various choices. A randomized, controlled trial showed that the ICPS program promoted gains in children’s social problem-solving abilities and led to teacher-rated improvements in frustration tolerance, impulsivity, and task engagement (Shure, 1992; Shure & Spivack, 1982).

**Al’s Pals: Kids Making Healthy Choices.** Another example of a universal social-emotional learning program designed for preschool children
and carefully evaluated is Al’s Pals: Kids Making Healthy Choices. Al’s Pals includes 46 lessons designed for preschool, kindergarten, and first-grade children. A hand puppet named Al is a positive role model who, along with his puppet friends Keisha and Ty, demonstrates a set of social-emotional skills in role-plays, discussions, original songs, and books. Skill concepts are introduced during 20-min lessons. Teachers are trained to prompt and reinforce the skills throughout the day, as the opportunity arises.

In one study of Al’s Pals, participating children who ranged in age from preschool to Grade 2 showed improved social skills and problem-solving abilities, as assessed by teacher ratings, compared to children in randomly assigned control classrooms who did not receive the program (Dubas, Lynch, Gallano, Geller, & Hunt, 1998). Similarly, another randomized trial of this curriculum conducted in Head Start classrooms produced significant effects on teacher-rated behavior problems and independent functioning (Lynch, Geller, & Schmidt, 2004).

**Preschool Promoting Alternative Thinking Strategies (PATHS) Curriculum.** The preschool PATHS Curriculum (Domitrovich, Greenberg, Cortes, & Kusche, 1999) is a third example of a preschool social-emotional learning program, and it is one of the more comprehensive, evidence-based programs available. The PATHS Curriculum (Conduct Problems Prevention Research Group, 1999; Greenberg & Kusche, 1998) was developed originally for elementary school students. In 1990, the developers began working with Head Start programs to develop a preschool version that represented a developmentally appropriate “downward extension” of the elementary program (Domitrovich et al., 1999; Domitrovich, Cortes, & Greenberg, 2007). Preschool PATHS targets skills in five specific domains: (1) cooperative friendship skills (helping, sharing, taking turns, being a fun and friendly play partner; (2) emotional awareness and communication (being able to identify and label one’s own and others’ feelings, understanding the impact of common events and behaviors on feelings and listening skills); (3) self-control/emotion regulation (inhibition of impulsive reactivity when angry or upset, calming down); (4) self-esteem (complimenting oneself and others), and (5) social problem solving (being able to follow the sequence of calming down, identifying the problem, generating alternative solutions, and selecting a positive solution). The units are divided into 33 lessons that are delivered by teachers during circle time. In these lessons, teachers use modeling stories, illustrated with pictures, puppet demonstrations, and role plays to illustrate skill concepts. A set of puppet characters, including Twiggle the Turtle and Henrietta the Hedgehog, are central to the program and model the use of skills in everyday problem situations. For example, in an initial modeling story, Twiggle the Turtle gets very upset, and a wise old turtle teaches him to stop himself from acting out when he feels that way. The wise turtle shows Twiggle how to pull into his shell and calm down first, so he is able to describe the problem, explain his feelings, listen to his friends, and find a way to solve the problem. Following Twiggle’s example, children are taught to tell themselves to stop when they are very upset and to do “turtle” by placing their arms across their chest and taking a few moments to calm down. Once calm, they are encouraged to explain how they felt and what was bothering them, as the first step in effective self-regulation and social problem solving. Twiggle has several puppet friends who are similarly involved in role-plays and stories and serve to illustrate important friendship and social problem-solving skills. For example, Henrietta the Hedgehog is a friend of Twiggle. In one story that teaches friendship skills, Henrietta learns that she feels good when she is able to share things with her friend Twiggle; it makes her happy when she sees her friend smile. During a PATHS lesson, Henrietta tells the children what she learned about “sharing” and how
much fun it was for her and her friend when she shared with Twiggle: “Every time you share with someone, you are showing that you care about him or her. That will make the other person feel happy and it will make you feel happy, too.” Henrietta invites the children to think about their sharing experiences and ideas. In a follow-up practice activity on sharing, each child is given a small bag of stickers and asked to notice how he or she and classmates feel when they share the stickers with each other. In this way, the PATHS puppets become models and coaches in the preschool classroom, encouraging self-regulation and prosocial skills to build a supportive peer community.

Each lesson includes ideas for formal and informal extension activities that teaching staff can use throughout the day to generalize key concepts. Teachers are encouraged to provide emotion coaching throughout the day, modeling feeling statements themselves when appropriate, helping children notice the feelings of peers, and prompting children to describe their own feelings. Teachers are also encouraged to watch for naturally occurring “teachable moments,” such as peer disagreements or conflicts. At these times, teachers are taught to help children stop and calm down (using “turtle”) and then talk through the problem-solving steps of defining the problem and their feelings, listening to their friend’s feelings, and generating ideas for how to solve the problem. Such teaching goes far beyond “Use your words, please!”—an instruction often heard in early childhood classrooms, as it provides children with an explicit set of steps and guidelines to support emotion regulation, self-control, and effective conflict management.

A randomized trial compared the development of children in 10 Head Start classrooms using Preschool PATHS with children in 10 “usual practice” Head Start classrooms; 287 children were followed for 1 year. Children who received PATHS showed higher levels of emotional understanding; they were rated as more socially competent by both teachers and parents when compared to children in the control-comparison classrooms (Domitrovich et al., 2007).

The Important Role of Professional Development and Support for Teachers

The universal interventions to support children’s social-emotional school readiness just described all provide teachers with a curriculum guide and materials to enhance social-emotional instruction. In addition, the extent to which children develop social-emotional skills depends heavily on the quality with which the teacher manages problem behavior and responds to children’s emotions and conflicts during the day. Increasingly, prevention programs are investing in more extensive professional development to support teachers in developing the skills they need to establish and maintain high-quality teacher–student relationships, to manage children’s behavior with positive support strategies, and to use emotion coaching and social problem-solving dialogue effectively in the classroom setting. Two recent studies illustrate the positive impact of programs that support teacher professional development on children’s school readiness.

The Chicago School Readiness Project (CSRP). This project (Raver, Jones, Li-Grining, Zhai, Metzger, & Solomon, 2009) provided Head Start teachers with training in positive classroom management strategies using an adapted form of the Incredible Years Teacher Training Program (Webster-Stratton, Reid, & Hammond, 2001). This intervention covered important classroom management topics, including the effective use of rules and routines to clarify classroom expectations, praise and positive incentives to encourage and reward child efforts and behavior, and effective (nonpunitive) limit setting to manage problem behaviors. In addition, CSRP provided teachers with a mental health consultant, who met weekly with teachers to provide coaching in the area of effective
classroom management and to provide emotional support for stress reduction. Mental health coaches also implemented individualized management plans for children displaying high levels of disruptive behavior in the classroom. Results from a randomized, controlled trial demonstrated that, compared with “usual practice” Head Start classrooms, the CSRP intervention classrooms had reduced levels of child aggressive and disruptive behavior (Raver et al., 2009). Furthermore, significant benefits for children emerged on enhanced preacademic skills (e.g., vocabulary, letter naming, math skills) and attention control (Raver, Jones, Li-Grining, Zhai, Bub, & Pressler, 2011). The intervention directors postulate that improvements in teacher’s classroom management skills and feelings of teaching efficacy led to increases in instructional time and child attention skills, thereby promoting gains in academic as well as social-emotional skills.

My Teaching Partner (MTP). In a second recent study documenting the benefits of investing in teacher professional development, Pianta and his colleagues (Pianta, Mashburn, Downer, Hamre, & Justice, 2008) used an innovative Web-based platform to deliver teacher support. The MTP program includes an array of Web-based professional development resources, including video exemplars and lesson plans on literacy and social-emotional topics (adapting Preschool PATHS content). In the Web-mediated consultation condition, teachers met regularly with an “online” coach. Teachers shared videotaped excerpts of their classroom lessons and received positive support, feedback, and suggestions from their online MTP coach. Teachers who received the full MTP program, with full access to Web-based resources along with online coaching, showed the greatest improvement in teaching quality (relative to those who had access to the Web resources but no coaching), and these effects were most pronounced in classrooms serving a high proportion of socioeconomically disadvantaged children (Pianta et al., 2008). The findings from these two studies document the importance of investing in teacher professional development, as well as evidence-based social-emotional curricula to improve preschool outcomes for at-risk children.

Integrating Social-Emotional Interventions with Classroom Language Enrichment

ICPS, Al’s Pals, PATHS, and CSRP were all developed as “stand-alone” universal social-emotional learning programs, designed for implementation in the context of any preschool setting. In every case, the developers felt these programs would be particularly helpful to children who were experiencing delays in social-emotional development because of socioeconomic disadvantage. Meanwhile, parallel to the development of these preventive interventions, other developers were focusing on preventive interventions that targeted the delays in language and preliteracy skills that also frequently accompany socioeconomic disadvantage.

In particular, language development is heavily affected by interactions with adults during early childhood, and it is frequently delayed among children growing up in poverty (Dickinson & Smith, 1994). For example, parents and teachers stimulate child language development when they use a rich and varied vocabulary in their talk with children and when they encourage and extend conversational exchanges between teacher and students. Speaking about occurrences and issues that are not represented concretely in the environment (e.g., “decontextualized” talk), such as talking about events that happened at another time, making future plans, or engaging in make-believe together all stretch and expand children’s ability to use language more flexibly and extensively. Furthermore, child vocabulary and syntax skill development benefits from adult responses that expand on...
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have helped teachers use enriched language in the classroom in ways that promote substantial gains in children’s oral language skills (e.g., Dickinson & Sprague, 2001; Landry, Swank, Smith, Assel, & Guennewig, 2006; Wasik & Bond, 2001; Whitehurst, Arnold, Epstein, Angell, Smith, & Fischel, 1994; Whitehurst, Epstein, Angell, Payne, Crone, & Fischel, 1994).

A good example is the recent study conducted by Wasik et al. (2006). In this preventive intervention, an interactive reading program was implemented in 10 Head Start classrooms. During reading sessions, teachers were encouraged to ask questions, make connections, and build vocabulary by explicitly teaching target vocabulary words with props and extension activities. Teachers were also taught general strategies for expanding on children’s utterances, for extending conversations, and for modeling rich language. The intervention was conducted over a 1-year period and included monthly workshops for teachers, combined with in-class coaching sessions in which a mentor modeled the strategy, observed the teacher using the strategy, and provided the teacher with written and oral feedback. The intervention succeeded in increasing the quality of classroom language use, and children in intervention classrooms showed significant gains in vocabulary that exceeded those in the comparison classrooms (Wasik et al., 2006).

Given the developmental interplay between language skills and social-emotional skill development, it is likely that integrating preventive interventions that target these two domains will have mutually facilitative effects. Both language skills and social-emotional skills represent areas of development that are often delayed by socioeconomic disadvantage. Recognizing the importance of both types of skill, social-emotional learning programs are now evolving to integrate components that concurrently promote language and related preliteracy skills. In the next section, we provide an in-depth description of one of these integrated programs.

In interactive book reading (sometimes called dialogic reading), teachers actively engage children in discussions about the book as they read. These discussions go far beyond simple “yes or no” questions posed by the teacher and answered by the children. Teachers ask probing questions to help the children to reflect on the emotions felt by story characters, consider the story sequence and cause–effect links in the story, and identify key vocabulary. This book-reading method is designed to foster vocabulary growth, narrative understanding, and reading comprehension. The combination of curriculum-based interactive book-reading lessons and more general professional development activities have helped teachers use enriched language in the classroom in ways that promote substantial gains in children’s oral language skills (e.g., Dickinson & Sprague, 2001; Landry, Swank, Smith, Assel, & Guennewig, 2006; Wasik & Bond, 2001; Whitehurst, Arnold, Epstein, Angell, Smith, & Fischel, 1994; Whitehurst, Epstein, Angell, Payne, Crone, & Fischel, 1994).

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Comprehensive Approaches to Preventive Intervention: Head Start Research-Based, Developmentally Informed (REDI) Program

The Head Start REDI program was designed to provide an enrichment intervention that could be integrated into the existing framework of Head Start programs using High/Scope or Creative Curriculum (Bierman, Domitrovich et al., 2008). The goal was to demonstrate that preventive interventions could successfully integrate social-emotional learning with other curricular components designed to promote language development and preliteracy skills. Specifically, REDI was organized to promote teachers’ capacities to use research-based practices in supporting both social-emotional learning and language/preliteracy skill development. The intervention includes curriculum-based lessons, center-based extension activities, and training in “coaching strategies” for teachers to use throughout the day to support generalized skill development.

Social-Emotional Learning in REDI. In the REDI program, Preschool PATHS serves as the universal social-emotional learning program delivered by teachers in Head Start classrooms (Domitrovich et al., 2007). Each week, teachers implement one PATHS lesson and one PATHS extension activity. In addition, the PATHS themes are linked systematically with an interactive reading program. One of the interactive reading books used each week discusses the PATHS theme of the week, thereby serving as a second PATHS extension activity and tying together the reading and social-emotional learning programs. Teachers are also encouraged to use PATHS compliments daily and to support generalized skill development with ongoing emotion coaching and support for student use of the self-control (“turtle”) technique and social problem solving.

Language and Preliteracy Skill Focus in REDI. REDI uses an interactive reading program, a “sound games” program, and print center activities to support concurrent language development and preliteracy skills.

The interactive reading program is based on the shared reading program developed by Wasik and Bond (2001; Wasik et al., 2006), which was, in turn, an adaptation of the dialogic reading program (Whitehurst et al., 1994). The REDI version includes two books per week (one focused on the PATHS theme of the week), each prepared with scripted interactive questions to guide teacher–student discussion. Teachers also present props to demonstrate target vocabulary words and encourage children to comment on and discuss the story. In subsequent sessions, teachers “walk through” each book a second time, using scripted questions to encourage child recall and comprehension of the narrative. Moreover, teachers receive mentoring in the use of “language coaching” strategies, such as expanding on children’s statements and exposing children to more complex grammar, to provide a general scaffold for language development in the classroom during the normal daily routines, such as mealtimes, and during lesson presentation or small-group times (Dickinson & Smith, 1994).

The REDI program also includes “Sound Games” to promote the preliteracy skills associated with phonological sensitivity that support the initial decoding skills related to learning to read (Adams, 1990). Phonological sensitivity refers to a child’s ability to recognize and manipulate the smaller units of sound within spoken words, such as syllables and phonemes (Lonigan, Burgess, & Anthony, 2000). Children who are able to rhyme, blend sounds to form new words, and otherwise recognize and produce segmented words and syllables, not through print but through hearing and speaking, acquire initial reading skills more quickly than children without these phonological skills (Lonigan et
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A number of studies have demonstrated that phonological sensitivity can be taught by providing children with carefully sequenced learning activities that target discrete skills (Ball & Blachman, 1991; Hatcher, Hulme, & Ellis, 1994).

REDI provides teachers with a set of “Sound Games” to use with their students to promote phonological sensitivity skills. Building on other programs (Adams, Foorman, Lundberg, & Beeler, 1998), these games progress through six units, moving from easier to more difficult skills during the course of the year (e.g., listening, rhyming, alliteration, words and sentences, syllables, and phonemes). Teachers use a 10- to 15-min small-group Sound Game activity at least three times per week.

Finally, REDI also includes print center activities specifically designed to enhance children’s letter recognition skills. Learning to recognize and identify letters of the alphabet is an important predictor of children’s early success in decoding printed text and learning to read (Scarborough, 2001). Research demonstrates that most children do not learn about letters in Head Start programs unless those programs are using an explicit curriculum and a teaching strategy to provide intensive exposure to letters and letter names (Ball & Blachman, 1991).

In REDI, teachers are provided with a developmentally sequenced set of activities to be used in their alphabet centers with individual children. They are asked to make sure that each prekindergarten child visits the alphabet center several times per week and are given materials to track the children’s acquisition of letter names. Materials provided to support student learning include letter stickers, a letter bucket, materials to create a “Letter Wall,” and craft materials for various letter-learning activities, such as letter collages, letter towers, and letter murals.

The preventive intervention components of the REDI program are designed for integration with a well-balanced and comprehensive preschool curriculum. For example, Table 7–1 illustrates how REDI is integrated with the Creative Curriculum (Dodge, Colker, & Heroman, 2002), which is frequently used in Head Start.

The REDI Professional Development Model.
The REDI professional development model for teachers includes initial training in the curriculum and ongoing consultation and support provided by REDI consultants, designed to enhance integration of REDI concepts and techniques throughout the day. REDI consultants provide teachers with suggestions in the area of effective classroom management (e.g., establishing clear and appropriate rules and directions; providing positive and corrective feedback for appropriate behavior; applying natural response cost procedures to reduce problem behaviors; and strengthening positive relations with children and parents). REDI consultants coach teachers in the use of interactive reading and provide encouragement and ideas for the development of conversations that extend children’s language.

In an evaluation of the Head Start REDI program, the progress of 356 four-year-old children was tracked over the course of the pre-kindergarten year. Classrooms were randomly assigned to use the REDI prevention curriculum or to continue with “usual practice.” The REDI prevention program promoted significant gains in teachers’ high-quality language use and social-emotional support for children (Domitrovich, Gest, Gill, Bierman, Welsh, & Jones, 2009). Children experienced important gains in multiple domains of school readiness—vocabulary, emergent literacy, emotional understanding, social problem solving, social behavior, and learning engagement (Bierman, Domitrovich et al., 2008)—and in some executive function skills and attention control (Bierman, Nix, Greenberg, Blair, & Domitrovich, 2008).


TABLE 7–1
Typical Classroom Schedule: Head Start REDI with Creative Curriculum

<table>
<thead>
<tr>
<th>Time</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
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<tbody>
<tr>
<td>9:05–9:10</td>
<td>Arrival</td>
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<tr>
<td>9:10–9:30</td>
<td>Whole-group “meet and greet” circle (calendar, weather, or other usual circle routines, <em>PATHS “Star of the day” and Compliments; Alphabet letter of the week introduced</em>)</td>
<td></td>
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<tr>
<td>9:30–10:00</td>
<td>Breakfast</td>
<td></td>
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<tr>
<td>10:00–10:15</td>
<td>Alphabet activities</td>
<td></td>
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<tr>
<td>10:15–10:45</td>
<td><em>PATHS Lesson</em></td>
<td>Sound Games</td>
<td>Sound Games</td>
<td>Sound Games</td>
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<tr>
<td></td>
<td>Math</td>
<td>Journal</td>
<td><em>PATHS extension</em></td>
<td>Journal</td>
</tr>
<tr>
<td>Small groups swap activities after 15 min</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>10:45–11:15</td>
<td>Physical development (outside)</td>
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<tr>
<td>11:15–11:25</td>
<td>Wash hands/free book time</td>
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<tr>
<td>11:25–12:00</td>
<td>Lunch</td>
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<tr>
<td>12:00–12:30</td>
<td>Music and movement</td>
<td></td>
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<tr>
<td>12:30–12:50</td>
<td><em>Interactive Reading</em></td>
<td><em>Interactive Reading</em></td>
<td><em>Interactive Reading</em></td>
<td><em>Interactive Reading</em></td>
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<tr>
<td></td>
<td>Science</td>
<td>Reading</td>
<td>Math</td>
<td>Reading Extension</td>
</tr>
<tr>
<td>Small groups swap activities after 10 min</td>
<td></td>
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<tr>
<td>12:50–1:50</td>
<td>Center Time</td>
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<tr>
<td>(Each child does 15-min REDI Alphabet Activity with progress monitoring once during week)</td>
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<tr>
<td>1:50–2:05</td>
<td>Dismissal</td>
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</tbody>
</table>

Note: Italicized entries indicate specific REDI curriculum components; REDI teaching strategies are encouraged throughout the day.

Strengthening Prevention Services for High-Risk Children: Indicated Prevention

Classroom curricula promote the school readiness skills of all children in the classroom and hence are called “universal” approaches. As illustrated by the Head Start REDI program, classroom programs that integrate research-based strategies in a comprehensive fashion to enhance oral language, emergent literacy, and social-emotional skills may be particularly valuable to children coming from low-socioeconomic backgrounds. Several additional prevention strategies are often used to strengthen the impact of classroom-based “universal” prevention programs.

Some children enter preschool with particularly large delays or special needs (such as developmental delays, language delays, or attention deficits) that put them at particular risk for school adjustment difficulties. These children often need services that are in addition to classroom-based programs and that provide more intensive instructional support, guided practice, and feedback (Odom & Brown, 1993). Prevention programs for children with delays or special needs are called “indicated.”
Early Prevention Initiatives

**Incredible Years Dinosaur Social Skills and Problem-Solving Curriculum.** This program was developed specifically for preschool and early elementary children (ages 4 to 8) who show high levels of aggressive-disruptive conduct problems (Webster-Stratton & Hammond, 1997; Webster-Stratton, Mihalic et al., 2001). It targets skills for positive peer interaction and friendship development, emotional understanding and expression, anger management, interpersonal problem solving, and appropriate classroom behavior. The program is delivered in weekly 2-hr sessions with small groups of five to six children for approximately 21 weeks.

**Peer Coaching Programs.** Social skill coaching programs have also been developed for withdrawn and disliked preschool children (Guglielmo & Tyron, 2001; Mize & Ladd, 1990; Odom et al., 1999). In these programs, adult “coaches” work with children in small groups, focusing on participation and play skills, communication skills, and conflict management skills. Modeling stories and short puppet plays are used to model skill concepts and children then have opportunities to practice the skills in play, guided and supported by the adult coach. Such materials and skill modeling may also be used in therapeutic interventions.

The randomized trial conducted by Odom and his colleagues (1999) provides good evidence of the value of social skills coaching for preschool children with special needs. In that study, an indicated intervention was provided to preschool children with mild to moderate developmental delays (e.g., mental retardation, behavior disorders, communication disorders) who were at risk for social and behavioral adjustment problems. In the child-focused coaching sessions, small groups of three to four developmentally delayed children met with teachers for 10 to 15 min per day for 25 days. These sessions targeted the play skills of initiating play, sharing, agreeing, leading a game, and trying a new way. In these groups, teachers introduced, demonstrated, and discussed the social skills concepts; they then had children role-play the social skills. The program also included peer partners who were “typically developing.” Teachers provided prompts and praise to encourage positive play between the typically developing peer partners and the special needs preschoolers. Teachers specifically coached the typically developing peers to initiate social encounters. They also provided structured activities and supports in the classroom setting to enhance opportunities for peer play between the developmentally delayed students and their typically developing peer partners. Odom et al. (1999) found that social skills coaching had a significant impact, increasing the quality of child social interactions (assessed with observer ratings) and social competence (assessed with teacher ratings).

**Resilient Peer Treatment (RPT).** The RPT (Fantuzzo, Manx, Atkins, & Meyers, 2005) is another example of a program that operates at the indicated level, as it is designed to foster the social skills and social adjustment of socially withdrawn preschoolers who have a history of maltreatment. Classmates who show high levels of social competence are selected to be “Play Buddies” for the socially withdrawn children; family volunteers provide the adult support needed for therapeutic play opportunities for the withdrawn children and their Play Buddies in the classroom. In a randomized trial of the RPT program delivered in Head Start classrooms, observers recorded significant increases in positive play interactions and decreases in solitary play behavior for the socially withdrawn children. Teachers also reported higher levels of collaborative peer-play interactions in the treatment setting; teacher ratings showed sustained gains in self-control and prosocial behavior and decreased levels of problem behaviors two months after the intervention.
Coordinated Parent-Focused Prevention Components. The impact of classroom-based prevention programs can also be strengthened by including coordinated parent-training programs (Sheridan, Knoche, Edwards, Bovaird, & Kupzyk, 2011). Notably, in one trial of the Incredible Years program, families of 97 children with early-onset conduct problems were randomly assigned to receive the Dinosaur Curriculum, a parent-training program, the combination of the Dinosaur Curriculum and parent training, or a wait-list control group (Webster-Stratton & Hammond, 1997). The Dinosaur Curriculum, used alone or in combination with parent training, produced significant improvements in social problem-solving skills (as measured in child interviews) and conflict-management skills (as measured by observations of play interactions with best friends). Parent training (used alone or in combination with Dinosaur Curriculum) produced greater effects on problem behaviors at home. The positive effects of the Dinosaur Curriculum and parent training were maintained at a 1-year follow-up (Webster-Stratton & Hammond, 1997). This study suggests that comprehensive coaching programs for young children with aggressive behavior problems and concurrent social-emotional skill deficits can enhance their social competencies, especially when combined with training that helps parents understand and support the child’s social-emotional growth.

CONCLUSION

In summary, prevention initiatives use developmental research to identify risk and protective factors associated with positive child outcomes. Preventive interventions are designed to foster the promotion of protective factors, and in that way to foster child resilience and positive outcomes. Although Head Start and other high-quality preschool programs have shown effectiveness in promoting school readiness (Barnett, 1995), research-based prevention initiatives can strengthen their effects, contributing to the school readiness of children at risk because of socioeconomic disadvantage. Critical skill domains associated empirically with school readiness and future school adjustment include social-emotional competencies (cooperative play skills, emotional understanding and regulation, self-control, and social problem-solving skills), and language skills. Comprehensive classroom-based prevention initiatives integrate a focus on skills in these two domains, fostering both the acquisition of specific knowledge and mature approaches to learning. Universal interventions are delivered by teachers and serve to promote the competencies and enhance resilience among all children in the classroom. They can be combined with indicated interventions, which provide more intensive therapeutic support to children with specific needs or developmental delays.

Implications for Education

The available empirical research provides a solid basis for guiding educational policy and practice. First, teachers should receive training in the developmental research that identifies risk and protective factors associated with school adjustment among children growing up in poverty; teachers should also be instructed in the prevention approaches that promote those competencies. Second, along with training, empirically supported emergent literacy and social-emotional curricula should be available to preschool teachers, enabling them to integrate these research-based educational strategies into their general preschool or prekindergarten curricula. Teachers should also have access to professional development and mentoring opportunities. Teaching practices, including language use, emotion coaching, behavioral management strategies, and generalized support for student self-control and social problem-solving skills play an essential role in promoting gains in child
social-emotional and language skills. Third, therapeutic support programs designed for children with special needs (e.g., developmental delays, learning difficulties, social withdrawal) should incorporate empirically supported social skill coaching procedures into intervention plans and coordinated support should be provided to parents, particularly to remediate early problems with aggression.

Estimates suggest that, on average, 16% of children in the United States enter school with significant deficits in social-emotional readiness, with prevalence rates particularly high among socioeconomically disadvantaged children (Rimm-Kaufman et al., 2000). Research-based universal and indicated preventive interventions have been developed and proven effective in fostering school readiness and in partially reducing the readiness “gap” associated with socioeconomic disadvantage. Ongoing efforts to further develop, evaluate, and widely disseminate effective preventive interventions should be a high priority in the education of preschool and prekindergarten teachers.

REFLECT ON

1. What are four social-emotional skills needed for school readiness and what does each mean?
2. Why is it important now to integrate language and preliteracy or emergent literacy skills into social-emotional interventions?
3. What special features characterize REDI and how are they integrated with the Creative Curriculum?
4. Identify and describe three socio-emotional learning programs and state why they are called “universal.”
5. How can one strengthen the impact of classroom-based prevention programs?

SELECTED RESOURCES

Centre of Excellence for Early Childhood Development
www.excellence-earlychildhood.ca/home.asp?lang=EN
Center on the Social and Emotional Foundations for Early Learning
www.vanderbilt.edu/csefel

REFERENCES


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(Eds.), Peer rejection in childhood (pp. 274–308). New York, NY: Cambridge University Press.


Early Prevention Initiatives


