A Program-Wide Model for Supporting Social Emotional Development and Addressing Challenging Behavior in Early Childhood Settings

Lise Fox
University of South Florida
Mary Louise Hemmeter
Vanderbilt University


The preparation of this manuscript was supported by the Center for Evidence-based Practice: Young Children with Challenging Behaviors, Office of Special Education Programs, U.S. Department of Education (H324Z010001), the Center on the Social and Emotional Foundations for Early Learning, US Department of Health and Human Services (90YD0215/01) and the Institute of Education Sciences (R324A07212).
A Program-Wide Model for Supporting Social Emotional Development and Addressing Challenging Behavior in Early Childhood Settings

In 2005, popular press headlines reported that expulsion rates for preschool children due to behavioral concerns exceeded those of elementary and secondary school students. This report put a national spotlight on an issue that has been quietly hidden within private and public preschool programs; challenging behavior is an issue for many children in the early childhood years. The national survey indicated that expulsion rates were higher for older children, boys, and African American children, and were higher within private and faith-based settings (Gilliam, 2005). Programs that had access to mental health or behavioral consultation were less likely to expel children than programs without access to those resources.

While the headlines may have been surprising to the general public, they were not surprising to early childhood researchers who have become increasingly concerned about the need to identify effective interventions for promoting very young children’s social emotional competence and addressing challenging behavior. Research on the developmental trajectory of young children who have challenging behavior presents a disturbing forecast; young children who have persistent challenging behaviors are highly likely to continue to have problems with socialization and school success, and mental health concerns into adolescence and adulthood (Dunlap et al., 2006).

The significant rates at which emotional and behavior problems occur in young children are well established with estimates of prevalence rates varying depending on the sample and criteria used. Campbell (1995) reviewed prevalence studies and estimated
that 10-15% of young children have mild to moderate behavior problems. Lavigne et al. (1996) conducted a five year longitudinal study of about 500, 2-5 year old children from pediatric practices in Chicago and determined that 21% of the children met criteria for a diagnosable disorder, with 9% classified as severe. Data from The Early Childhood Longitudinal Study revealed that 10% of kindergarteners arrive at school with problematic behavior (West, Denton & Germino-Hausken, 2000). Children living in poverty appear to be especially vulnerable, exhibiting rates that are higher than the general population (Qi & Kaiser, 2003). Data from a Head Start sample estimated prevalence rates between 10% to 23% for externalizing behaviors (Kupersmidt, Bryant, & Willoughby, 2000). The presence of social emotional problems can also be found in very young children with a report of 4.5% of one year olds in a large community sample having extreme scores on the difficult child index of the Parenting Stress Index (Briggs-Gowan, Carter, Skuban, & Horwitz 2001).

In addition to concerns about the numbers of children with emotional and behavioral problems, research has demonstrated that early problems often persist well beyond early childhood. A review of longitudinal studies revealed that approximately 50% of preschool children with externalizing problems continued to show problems during their school years, with disruptive behavior showing the highest rates of persistence (Campbell, 1995). There appears to be remarkable stability both within the early years, with 88% of boys identified as aggressive at age 2 continuing to show clinical symptomology at age 5 and 58% remaining in the clinical range at age 6 (Shaw, Gilliom & Giovannelli, 2000) and into adolescence (Egeland, Kalkoske, Gottesman, & Erickson, 1990; Pierce, Ewing & Campbell, 1999). The diagnosis of Oppositional Defiance
Disorder (ODD) in the preschool years is predictive of subsequent diagnoses of ODD and Attention Deficit Hyperactivity Disorder (ADHD) in grade school, with 50% of children who are diagnosed with ODD in preschool continuing to have difficulties in second and third grade (Lavigne et al., 2001). When children enter school with problem behavior and poor social skills, those problems are likely to persist (NICHD Early Childhood Research Network, 2003).

The prevalence and stability of severe problem behavior has resulted in a national interest in providing early intervention to children in the toddler and preschool years and prior to school entry (U. S. Public Health Service, 2000; Shonkoff & Phillips, 2000; Simpson, Jivanjee, Koroloff, Doerfler, & Garcia, 2001). The primary settings in which this effort is likely to occur are community-based early childhood programs including public preschool programs, head start programs, and community child care. Tragically, many early childhood programs feel unequipped to meet the needs of children who are emotionally delayed or have problem behavior (Kaufmann & Wischmann, 1999). Teachers report that disruptive behavior is one of the single greatest challenges they face in providing a quality program and that there seem to be an increasing number of children who present with these problems (Arnold, McWilliams, & Arnold, 1998).

In this chapter, we describe a tiered model of prevention and promotion practices as a framework for the implementation of supports and interventions for young children within early childhood classrooms and programs (Fox, Dunlap, Hemmeter, Joseph, & Strain, 2003). The model that we describe is used in a similar fashion to school-wide positive behavior support as a program-wide effort to create systems of support for all children including those with the most challenging behavior and contributes to recent
efforts to adapt the school-wide PBS adoption process for early education programs (Benedict, Horner, & Squires, 2007; Frey, chapter 6 of current volume; Stormont, Lewis, & Beckner, 2005; Stormont, Smith, & Lewis, 2007). The chapter will provide an overview of the model and the practices affiliated with each tier and then discuss the issues related to program-wide adoption with early childhood systems of care. The discussion of program-wide adoption will include information on the steps to program-wide adoption and illustrations of the process and outcomes in a range of early childhood programs. The chapter ends with a discussion of future directions for this promising model.

The Teaching Pyramid Model

The inspiration for the Teaching Pyramid model came from public health models of promotion, prevention, and intervention frameworks (Gordon, 1983; Simeonsson, 1991) and the school-wide PBS three-tiered triangle (Horner, Sugai, Todd, & Lewis-Palmer, 2005; Walker et al., 1996). Thus, similar to the public health model, we describe the need for universal, secondary, and tertiary interventions to ensure the social emotional development of all children, the provision of targeted supports to children at risk, and the inclusion of interventions for children with persistent challenges (Fox et al., 2003; Hemmeter, Ostrosky, & Fox, 2006; Powell, Dunlap, & Fox, 2006). In addition, the Teaching Pyramid model includes a detailed description of the research-based teaching practices that should be included at each level of the model within early childhood programs. These practices are drawn from the research on the classroom and teaching variables that promote children’s social emotional development or are effective in addressing challenging behavior (Hemmeter et al., 2006).
Universal promotion practices. The universal level of the Teaching Pyramid model describes practices that have been shown to promote the social development of children in early childhood programs. These practices include the development of responsive and positive relationships with children and the provision of high quality environments (Howes, Phillips, & Whitebrook, 1992; Peisner-Feinberg & Burchinal, 1997; Peisner-Feinberg et al., 2000; Phillips, McCartney, & Scarr, 1987).

In the Teaching Pyramid model (see figure 1), we place building positive relationships with children, families, and colleagues as the foundation for all other practices and the universal conditions that are necessary for social competence promotion and behavior guidance. The focus on relationships puts primary importance on the teacher engaging in responsive and positive interactions with children and the development of partnerships with families. Moreover, it includes the critical importance of collaboration and teaming that is essential to the provision of a high quality classroom environment and early childhood program.

--- insert Figure 1 about here ---

The relationships level of the pyramid model includes teaching practices that are linked to positive child outcomes in behavior and social skills (Birch & Ladd, 1998; Bodrova & Leong, 1998; Cox, 2005; Howes & Hamilton, 1992; Howes & Smith, 1995; Kontos, 1999; Mill & Romano-White, 1999; National Research Council, 2001; Pianta, Steinberg, & Rollins, 1995). These practices include: actively supporting children’s play; responding to children’s conversations; promoting the communicative attempts of children with language delays and disabilities; providing specific praise to encourage
appropriate behavior, developing positive relationships with children and families, and collaborative teaming with colleagues and other professionals.

The second category of universal practice that is linked to promoting the social competence of all children is the provision of supportive environments and teaching interactions that support children’s appropriate engagement in classroom activities and routines (DeKlyen & Odom, 1998; Frede, Austin, & Lindauer, 1993; Holloway & Reichart-Erickson, 1988; Jolivette, Wehby, Canale, & Massey, 2001; National Research Council, 2001; Peisner-Feinberg et al., 2000). This level of the pyramid includes the following practices: providing adequate materials; defining play centers; offering a developmentally appropriate and balanced schedule of activities; structuring transitions; providing individualized instructions for children who need support; teaching and promoting a small number of rules; providing clear directions; and providing engaging activities. These are all practices that are recognized by early educators as fundamental to a high quality learning environment that fosters children’s skill development and learning.

Social emotional teaching strategies. In the Teaching Pyramid model, the provision of explicit instruction in social skills and emotional regulation comprises the secondary practices tier (Coie & Koeppl, 1990; Denham & Burton, 1996; Mize & Ladd, 1990; National Research Council, 2001; Schneider, 1974; Serna, Nielsen, Lambros, & Forness, 2000; Shure & Spivack, 1980; Vaughn & Ridley, 1983; Webster-Stratton, Reid, & Hammond, 2001). In early childhood programs, all young children will require adult guidance and instruction to learn how to express their emotions appropriately, play cooperatively with peers, and use social problem solving strategies. However, for some
children it will be necessary to provide systematic and focused instruction to teach children discrete social emotional skills.

In this tier of the model, teachers are guided to provide instruction on the following skills: identifying and expressing emotions; self-regulation; social problem solving; initiating and maintaining interactions; cooperative responding; strategies for handling disappointment and anger; and friendship skills (e.g., being helpful, taking turns, giving compliments). In addition, teachers should develop strategies for partnering with families in the instruction of these skills in both the home and preschool settings. Many teachers use commercially developed curricula to support their instruction of these skills and several curricula have empirical support for their effectiveness (Joseph & Strain, 2003).

Some early educators believe that the instruction of social skills occurs naturally within preschool programs as children are developmentally moving from solitary play skills to playing with others. However, the Teaching Pyramid model requires that teachers become intentional about how to teach social skills in a manner that moves beyond the provision of well planned environments and supportive interactions. The instruction of social and emotional skills requires a systematic and comprehensive approach using embedded instruction within planned and routine activities. Effective teaching strategies include teaching the concept, modeling, rehearsing, role-playing, prompting children in context, and providing feedback when the behavior occurs (Grisham-Brown, Hemmeter, Pretti-Frontczak, 2005; Landy, 2002).

The objective of a secondary tier of practices is to provide instruction to children who are at-risk of developing problem behavior, but for whom an individualized behavior support plan may not be necessary. The precise distinction of that level of risk is often
difficult to discern among young children who are all developmentally expected to engage in minor levels of challenging behavior. For example, early educators expect to guide the behavior of preschool children who tantrum to express their frustration or who grab toys from peers when they want a turn. Thus, the Teaching Pyramid model includes the instruction of social emotional skills for all children and the need to provide targeted skill instruction that is individualized and systematic to children who may have challenges in social interaction or emotional regulation and are at risk of developing challenging behavior.

**Intensive, individualized interventions.** The Teaching Pyramid model includes the implementation of comprehensive, assessment-based behavior support plans for children with persistent challenging behavior (Chandler, Dahlquist, Repp, & Feltz, 1999; Fox & Clarke, 2006; Fox, Dunlap, & Cushing, 2002; Reichle et al., 1996). When a child has persistent challenging behavior that is unresponsive to classroom guidance procedures and the instruction of social and emotional skills, a collaborative team is formed with the family to engage in the process of individualized positive behavior support (I-PBS). This process is guided by a trained behavior specialist who is on staff or by a consultant (e.g., school psychologist, behavior specialist, mental health consultant) who provides consultation and support to the program.

The I-PBS process begins with a team meeting to discuss the child’s challenging behavior and develop strategies to gather information through a functional assessment. The classroom teacher and family contribute to the functional assessment process by providing observation data and participating in interviews. Once functional assessment data have been gathered, the collaborative team meets again to affirm behavior
hypotheses and brainstorm behavior support strategies. The behavior support plan includes antecedent prevention strategies to address the triggers of challenging behavior; replacement skills that are alternatives to the challenging behavior, and consequence strategies that ensure challenging behavior is not reinforced or maintained. The behavior support plan is designed to address both home and preschool routines where challenging behavior is occurring. In this process, the team also considers supports to the families and strategies to address broader ecological factors that affect the family and their support of the child (e.g., housing, transportation, mental health supports) and issues that may affect the developmental status of the child (e.g., trauma counseling, medical treatment).

Once the behavior support plan is designed, it is implemented by classroom staff and the family. The behavior specialist or consultant provides the teacher with coaching during the initial days of implementation and is available to the family as they implement the behavior support strategies at home and in the community. The teacher and family collect ongoing data, usually in the form of a behavior rating scale, to provide information on the effectiveness of the plan in reducing behavior incidents. The collaborative team meets on a regular basis to review plan implementation and child outcomes.

The Teaching Pyramid in action. The Teaching Pyramid defines the classroom practices needed to support the social emotional development of young children. Thus, there is a focus on the strategies that teachers will use in their relationships with individual children and families. This focus on individual children and their families is considered an essential practice in early education and the use of whole class behavior management systems without regard for a child’s developmental level or individual needs.
would violate how the field defines appropriate practice (Bredekamp & Copple, 1997). However, when you enter into a classroom where the Teaching Pyramid model is in place there is a palpable difference in comparison to classrooms where there is less focus on promoting social emotional competence.

We have developed and are field-testing the Teaching Pyramid Observation Tool (TPOT) (Hemmeter & Fox, 2006) which is an implementation fidelity tool that reliably assesses the implementation of the Teaching Pyramid practices in preschool classrooms. In classrooms with high implementation fidelity, the adoption of these practices is immediately observable (Hemmeter, Fox, & Doubet, 2006; Hemmeter, Fox, Jack, & Broyles, 2007). Classrooms who have adopted the Teaching Pyramid have visual displays of behavior expectations and classroom rules that are used in the instruction of children to review expectations or discuss the importance of rules. Teaching staff remind children of expected behavior and reference the behavior expectations within the ongoing activities of the day. In the high implementation classrooms, we see well-planned transitions; carefully designed learning activities or centers, and classroom schedules that promote child engagement; and the intentional teaching of social skills within all activities (e.g., group time, centers, outdoor play, bathroom, and snack). Classroom staff are constantly interacting with children, guiding their play, promoting their communication, and providing specific instruction, encouragement and praise for appropriate behavior and the use of social skills.

In classrooms with implementation fidelity, there may still be behavior incidents but the teacher’s response to those incidents is different. Teachers confidently intervene with child disagreements and guide children to use problem solving or conflict resolution
procedures. When children express frustration or anger, teachers validate the emotion and support children to use more appropriate forms of expression. If a child has severe behavior challenges, teachers calmly intervene or use program adopted procedures to gain assistance with the child. In our observations of classrooms with implementation fidelity, we see children who are highly engaged and teachers who are guiding children’s engagement and learning with confidence.

Implementing the Teaching Pyramid in Early Childhood Programs

Over the last five years, we have worked with a variety of early childhood programs to implement program-wide PBS (Fox & Little, 2001; Hemmeter et al., 2006; Hemmeter et al., 2007). These programs have included a small faith-based child care program, large Head Start programs, public school early childhood programs and state level implementation across multiple early childhood service delivery systems. Through this work, we have found that the implementation of program-wide PBS in early childhood settings requires a different approach than the implementation of school-wide PBS because of the range of early childhood service delivery systems, the developmental needs of very young children, and the availability (or lack there of) of systems and resources to support program-wide implementation. Unlike public school education for school age children, preschool children are served in a variety of early childhood systems including Head Start, child care, and public preschool. These systems vary in the education level and qualifications of their teachers, access to resources and behavior support expertise, administrative staff to support the process, and implementation of data collection systems.
**Head Start.** Head Start is a federally-funded child development program that serves children from birth through age 5 in center and home based programs. Children are eligible for Head Start if their families’ income is below the federal poverty level and 10% of their enrollment slots are reserved for children with special needs regardless of the income level of their family. Head Start is a federal to local program meaning that money flows directly from the federal program to local grantees. A local grantee agency may have multiple programs housed in multiple sites. All Head Start programs must adhere to federal program performance standards.

As a result of the federal program and mandates, Head Start has a variety of supports and resources in place that could provide support for program-wide implementation. Head Start programs have performance standards for mental health and behavior support services and as a result must have written policies and procedures in place related to these issues. They have resources for mental health consultants, management staff responsible for training and coaching teachers, and an ongoing program improvement process in place.

Data from the most recent FACES (National Head Start Families and Child Experiences Survey) study (Zill et al., 2006) found the quality of programs to range from minimal to excellent with over 60% of the study programs falling in the good to excellent range. This represents an ongoing trend toward quality improvement in Head Start. Traditionally, teachers have not been required to have a college degree nor have they been required to have a teaching license. While there are regulations in place to increase the number of teachers with credentials including college degrees, associate degrees and/or Child Development Associate (CDA) credentials, the regulations give programs
several years to meet these regulations and only require that a certain percentage of staff meet the credentialing requirements. Another issue in Head Start programs is the tendency for national initiatives to drive what happens in local programs. The most recent example of this is the implementation of the National Reporting System that required all programs to assess all children multiple times during the school year (Hill, 2003). These initiatives have demanded the program’s attention and resources making it difficult to be proactive about more locally determined needs such as behavior support. Finally, while Head Start programs have resources, policies, and procedures related to behavior support in place as described above, the effective implementation of these practices varies a great deal. Written policies and procedures related to behavior do not always translate into the consistent or effective implementation of those practices in programs (Quesenberry, 2007).

Public school preschool. Public school preschool programs vary in type, funding, and location of programs. For over 20 years, states have been providing services to preschool children with disabilities in a variety of settings. Over the last 15 years, states have become involved in providing programs for preschool children who are at-risk and most recently, many states have begun looking toward universal Pre-K for all four year old children. In 2006, 38 states were working on some type of Pre-K initiative for at-risk children (Barnett, Hustedt, Hawkinson, & Robin, 2006). States have different service delivery models with some states housing Pre-K programs primarily in schools and other states choosing to house Pre-K programs in a variety of community based settings including Head Start and child care.
It is difficult to describe the resources available to publicly funded Pre-K programs because of the variability of funding and models of implementation across states. When the Pre-K programs are housed in public school settings such as elementary schools, programs may have resources available to implement program-wide PBS including licensed teachers, behavior support personnel, and administrative staff responsible for professional development. However, when Pre-K programs are housed in public schools or community based settings such as Head Start or child care centers, access to resources may be determined by the setting in which they are housed. Even when Pre-K programs are housed in public schools, there may be limitations to the resources that are available. For example, there may be a school wide PBS initiative but the Pre-K program may not be included in the initiative or there may be behavior support personnel but they don’t have experience working with very young children.

There are some limited national data available on the quality of state Pre-K programs. Of those states that have Pre-K initiatives, just over half require teachers to have a BA while others require a credential such as a CDA. The quality of state funded Pre-k programs is difficult to summarize as evaluations are typically state funded and implemented. Recent data available across states describe the extent to which state Pre-K programs are meeting 10 benchmarks of quality. Of the programs that were reviewed, there was a wide range of quality with 11 programs scoring below 5, 18 meeting 5-7 of the benchmarks, 16 meeting 8-9, and 2 meeting all 10 of the benchmarks (Barnett et al., 2006). Sixteen states raised their quality standards enough to meet benchmarks they had not met in previous years.
**Child care.** Child care is a complex service delivery system that includes a variety of different program models, none of which is funded fully by federal or state resources. Child care includes center based programs, family day care homes, and family, friends and neighbor care. There are federal subsidies that can be used to assist needy families in accessing child care. These monies are administered through state block grants. The federal government also provides monies to states to work toward quality improvements in child care and funds a national network of Child Care Resource and Referral Agencies. Child Care is in many cases, the system least likely to have access to the resources needed to implement program-wide behavior support. Probably the most compelling difference in child care is the lack of financial resources. Many childcare programs depend almost entirely on paid tuition and state subsidies neither of which are typically adequate for running a high quality child care program. Many child care centers have no administrative staff other then the director, and in some small child care centers, the director also serves as a teacher. Many child care centers have relatively few training and degree requirements for teachers and require minimal ongoing professional development experiences. These characteristics can seriously affect the quality of care. The Cost, Quality and Outcomes study, a national evaluation of child care programs, found that the quality of care in the settings in their study was frequently below average with only 25% of the programs scoring in the good range or higher (Peisner-Feinberg et al., 2000).

One resource that is available to child care programs is the Resource and Referral Network. This network is designed to support families by providing information about child care in their community. In addition, they support local child care programs by providing training and technical assistance, but typically they cannot provide the level of
support that is needed for programs to be able to implement a program-wide PBS model. Finally, many states have started implementing quality rating systems for child care programs. These systems often provide incentives for programs to improve their quality rating and some professional development support to address quality improvement. Regardless of these potential resources, child care programs generally have the fewest resources for implementing a program-wide model.

The descriptions of these systems provide a framework for understanding the complexity of developing a program-wide model of behavior support in early childhood settings. Within and across these settings, there is a great deal of variability in program quality, training and qualifications of staff, and resources available to support a program-wide model. An early childhood program-wide model must be adapted to address the diverse needs of all early childhood settings.

In addition to the issues described above, there are a number of other issues that should be addressed in the design and implementation of a program-wide model for early childhood settings. The cognitive abilities of young children and the developmental nature of problem behavior in young children has significant implications for the practices that are implemented within a program-wide model. For example, a token system that works with older children to support prosocial behaviors may be less effective for young children given their cognitive and social development levels and might not be consistent with recommended practice. Finally, the application of a program-wide PBS model in early childhood programs should be focused on the classroom adoption of prevention and intervention strategies that are effective in promoting young children’s social and emotional development and addressing
challenging behavior (Fox et al., 2003). As described above, the Teaching Pyramid includes primary promotion practices of building positive adult-child relationships and the development of supportive classroom environments (e.g., routines, transitions, engaging activities, clear expectations), secondary practices of providing intentional and systematic instruction of social skills and emotional competencies (e.g., friendship skills, problem solving, communicating emotions, anger management), and at the tertiary level the provision of individualized interventions for children with persistent challenging behavior. Within an early childhood setting, the implementation of all levels of practice concurrently will be necessary for addressing the social emotional needs of all children in a preschool classroom.

Program-Wide Adoption of the Teaching Pyramid

The implementation of program-wide PBS follows many of the essential elements of SW-PBS, but has been tailored to address the unique configuration, services, and resources of early childhood programs and the developmental needs of young children. An essential component of program-wide PBS in early childhood settings is family involvement. Families should be involved in the development, implementation and evaluation of the program-wide PBS plan. Many of the strategies associated with the Teaching Pyramid involve families with the assumption that outcomes for children will be better if there is consistency between home and school. In addition, the early childhood years provide the context for supporting families in taking an active role in their child’s education which sets the foundation for their involvement throughout the child’s schooling. Second, the Teaching Pyramid Model provides the system of practices that should be implemented in early childhood classrooms at the universal, secondary and
tertiary levels. Rather then phasing in universal, secondary and tertiary interventions, teachers are trained and supported in using practices at all levels of the pyramid from the beginning.

In our work, we have identified several “readiness indicators” that need to be in place for a program to be successful. First, programs have to have a “champion.” An administrator within the program who understands the model, can articulate the benefits to staff, is willing to commit necessary resources and who is trusted by the staff has to be willing to lead the initiative. Second, programs must have or find resources for providing ongoing training and support to those staff who work directly with children and families. Program-wide implementation will simply not work if teachers do not have the competence and supports necessary to implement the model. Third, the program has to identify a leadership team that includes administrators, staff, families and personnel with expertise in behavior support. It is the responsibility of the team to meet regularly, collect data, monitor progress, fidelity and outcomes, and use the data to modify the plan. The team has to commit to a longitudinal process.

The Leadership Team begins the process by developing an implementation plan that includes the steps described below. These steps are designed to increase the likelihood that program-wide adoption and implementation will occur by ensuring that staff are committed to the process, have the training needed to implement the Teaching Pyramid practices, and that there are systems within the program that are supportive of teachers and are effective in addressing problem behavior.

Determine Staff Commitment. In school-wide behavior support, commitment from at least 80% of program staff is required (Horner & Sugai, 2000). This is also essential to
program-wide implementation of the Teaching Pyramid model. Leadership teams can design strategies to establish buy-in and develop a process for obtaining commitment from program staff including classroom staff, administrators, and other support staff (e.g., secretaries, custodians, kitchen staff). Programs with which we have worked have used a video on the Teaching Pyramid to provide an overview of the model to staff and then have staff complete a survey indicating the extent to which they can be committed to the model. Showing video is an effective strategy for describing the approach including the importance of providing support systems for staff to implement the model.

*Develop a Plan for Family Involvement.* As we described above, family involvement should be a key component of program-wide implementation in early childhood programs. The leadership team should plan strategies for (a) providing information to families, (b) creating opportunities for training and supporting families, (c) developing a team-based process that includes family members when addressing an individual child’s problem behavior, and (d) providing opportunities for families to give feedback and input to the program about the program-wide initiative.

*Identify program-wide expectations.* A primary component of universal practices in the school-wide model is the identification of school-wide expectations for children’s behavior that create a focus on teaching positive, prosocial behaviors and preventing problem behaviors (Horner & Sugai, 2000; Lohrmann-O’Rourke et al., 2000; Taylor-Greene & Kartub, 2000). The implementation of program-wide expectations by all staff increases the frequency with which children get feedback on their social behaviors across multiple settings in a school or program. The adoption of program-wide expectations provides staff, families and children with a positive way to talk about behavior. We guide
early childhood programs to generate a list of developmentally appropriate expectations they have for children and to categorize those into a small number of expectations that are written in terms that young children can learn to use (Benedict et al., 2007). Programs then define what the expectations look like in different settings in the school or program. In the classroom, the expectation, “Be Respectful,” might be translated into classroom rules that include use quiet voices, use soft touches, pick up your toys and help your friend.

*Develop strategies for teaching and acknowledging the expectations.* Once expectations are identified, a systematic plan for teaching and acknowledging the expectations should be developed. For young children to learn what the expectations mean and what they look like (e.g., rules), it will be important to teach the expectations within meaningful contexts across multiple program environments (e.g., classroom, bathroom, hallway, bus, playground). Programs should develop strategies, activities, and schedules for teaching the expectations. A range of strategies should be used including role-playing, modeling, discussion, practice, feedback in context, and reflection. Early childhood programs often use social emotional curricula which can be linked to the expectations identified by the program. In addition, a variety of materials including books, puppets, social stories, and games can be used to teach the expectations. Programs should also be intentional about developing strategies for acknowledging the expectations. Our experience with programs is that they have chosen acknowledgement strategies that can be embedded naturally into ongoing interactions with children (e.g., positive descriptive feedback, discussion during group times).
Develop processes for addressing problem behavior. Through our work with programs (Hemmeter et al., 2007; Hemmeter et al., 2006), interviews with program staff (Quesenberry & Hemmeter, 2005), and review of program policies and procedures (Quesenberry, Ostrosky, & Hemmeter, 2007), we have found that many early childhood programs do not have systems in place for addressing the needs of children with persistent problem behavior or there are systems in place that are either not effective or not consistent. We also know that children with persistent challenging behavior are at-risk for being expelled from preschool programs (Gilliam, 2005). In order to ensure that teachers remain committed to the program-wide plan and children are not expelled from the program, there must be processes in place for addressing the needs of those children with the most challenging behaviors including a process for responding to short-term crisis situations (e.g., a child is “out of control” in a classroom) as well as addressing the needs of individual children with ongoing, persistent problem behavior. The process should specify (a) what teachers do in each situation in terms of documentation that is needed, (b) the staff that is responsible for responding to teacher requests, and (c) strategies for addressing the situation.

Develop a professional development plan. The program-wide implementation plan should include strategies for ensuring that all staff have the training needed to effectively implement the Teaching Pyramid practices. In addition, staff need training in the processes that will be used for addressing persistently challenging behavior. Finally, training related to teaching the expectations will be necessary to ensure all staff (e.g., teachers, teaching assistants, administrators, custodians, kitchen staff, bus drivers) are supporting children around the expectations. The plan should also provide professional
development opportunities that are individualized, provided in the teachers’ classroom, and ongoing. The TPOT (Hemmeter & Fox, 2006) which was described above can be used as a tool for determining what practices teachers are implementing and in what areas they might need additional training and support.

*Develop a Data Collection Plan that Addresses Implementation Fidelity and Outcomes.* An important activity of the leadership team will be to use data for planning and decision making (Horner, Sugai, & Todd, 2001). In school-wide models, “office discipline referrals” are used as a primary measure of the effectiveness of the school-wide plan for reducing discipline problems. Sending children to the office is not a typical practice in early childhood programs. We have developed a tool called the Behavior Incident Report (BIR) that some early childhood programs have adopted to track the frequency and type of challenging behavior. The BIR provides information on the specific behaviors that occur as well as the settings, activities, and times when problem behavior is most likely to occur. These data can be used to document the change in behavior incidents over time, and information on variables that predict problem behavior can be used to develop professional development activities and other strategies. For example, if behavior incidents occur most frequently during large groups, the program might provide professional development opportunities on designing and implementing large group activities. The BIR data might also provide the team with information that would lead to other changes. For example, if there is a significant number of behaviors that occur on the playground, observations might be conducted and strategies developed to decrease the likelihood that challenging behavior will occur in that setting (e.g., increase supervision, add more activities or toys, decrease number of children on the
playground at the same time). The leadership team also should gather data on the progress of the program and individual teachers in the adoption of the program-wide model and the Teaching Pyramid practices. We have developed a checklist for leadership teams to use to assess the implementation of the essential elements of the program-wide model (i.e., Early Childhood Benchmarks of Quality, available from the authors). In addition, as described above, the team may decide to use the TPOT to track individual teachers’ progress toward implementation of the Pyramid practices.

Examples of Program-Wide Implementation

In the following section, we provide an overview of program-wide implementation in a child care program and a public school program as well as an example of statewide implementation that includes multiple early childhood service delivery systems. The three programs have approached program-wide implementation somewhat differently, but include many of the key features we described above.

Palma Ceia Presbyterian Preschool. Palma Ceia Presbyterian Preschool is a faith-based preschool program that has been operating for over 25 years. It was started as a program to provide early education experiences to young children with disabilities and also enrolled typically developing children to serve as playmates. As models for providing inclusive early childhood special education were refined over time, the program evolved into its current status of a high quality early childhood program that serves primarily typically developing children with a natural proportion of children with disabilities.

The program is highly regarded within the community and typically has a substantial waiting list for admissions. The founding director still operates the preschool and is
recognized as a leader in early childhood education and the provision of high quality programs for young children with and without disabilities. The preschool was one of the first early childhood programs in its community to receive accreditation from the National Association for the Education of Young Children (NAEYC) and staff have served as trainers and validators for other programs that pursue accreditation.

The preschool is small and enrolls about 60 children from ages 12 months to five years who attend a half-day program. The inclusion of children with disabilities is at the heart of the program and the preschool is committed to the support of children with physical, medical, and mental challenges. The program became interested in the adoption of a model for supporting the enrollment of children with challenging behavior when they were confronted with children whose behavior was not responsive to their typical child guidance procedures. While problem behavior was rare in the program, staff felt unequipped to deal with the most extreme challenges that were exhibited by some children in their program who had disabilities and autism.

In 1997, the program director sought the assistance of a university consultant to implement a model that would be developmentally appropriate, have contextual fit with their educational approach and program values, and could be implemented by program staff within the context of classroom routines (Fox & Little, 2001). Prior to the initiation of this effort, the program had consulted several outside experts for advice about individual children but did not feel that their recommendations were feasible for implementation within the program or a match to the school’s values and instructional philosophy.
Palma Ceia Preschool had many of the elements of the Teaching Pyramid model in place. Teachers within the program were highly skilled and received ongoing professional development and supervision. The small size and stable leadership of the program allowed for the development of intimate and strong relationships between families and preschool staff. In the structure of classroom environments and teaching interactions, there was very little need of improvement. However, the program was concerned that they were completely unprepared to effectively and appropriately respond to some of the challenging behaviors of their children.

The adoption of the program-wide initiative at Palma Ceia Preschool occurred during the time reports were first being published on the concept of SW-PBS. The effort at Palma Ceia initially included only some of the elements that are now more common to a school-wide or program-wide effort. At Palma Ceia Preschool, the focus was on the development of tertiary supports for children with the most severe challenging behavior. It was the explicit desire of the preschool to have a zero reject policy in the program and ensure that they had the capacity to support all children who chose to enroll in the school.

The university consultant assisted the program by teaching program staff the process of individualized positive behavior support (see Chapter 3 of this volume). This effort was launched with a training workshop for all program staff on positive behavior support and the implementation of comprehensive behavior support plans. The preschool included information on PBS within the parent handbook and stated clearly what steps would be taken to collaboratively develop a plan with the family when there were concerns about challenging behavior.
In the first year of the effort, four children received a functional assessment and behavior support plan. The I-PBS process was conducted by a collaborative team (director or assistant director, teacher, parent) with guidance from the University consultant. The explicit goal of the effort was to ensure that effective support was provided to children and to build the capacity of the program to be able to implement I-PBS without reliance on outside consultation. In the next two years of adoption, the consultant was available to assist with training of staff and refining the model. During this period, an additional four behavior support plans were developed and implemented.

In the last decade, Palma Ceia has continued to rely on I-PBS as their process for addressing the needs of children with persistent behavior challenges. Each year they typically have one or two children who need that level of individualized, intensive support. In addition, the preschool has added elements from the teaching pyramid model and now has adopted program-wide expectations that are promoted in classrooms and with their families.

Valeska-Hinton Early Childhood Education Center. Valeska Hinton Early Childhood Education Center (VHECEC) is a NAEYC-accredited, public school program in Peoria, Illinois that serves over 400 children in preschool through first grade. In addition, the Center houses a variety of other programs. Highly qualified staff, family involvement and ongoing professional development are key components of the program.

At the time that they began thinking about a program-wide approach, VHECEC has had ongoing concerns about challenging behavior. In the spring of 2002, the existing administrative team (i.e., principal, professional development coordinator, lead teacher, family liaison) discussed the need to focus on supporting children, teachers and families
in the area of social and emotional development and challenging behavior. The May 2002 Professional Development Goals Survey gathered from the staff identified challenging behavior as the most requested training need. Staff members were felt unsupported, frustrated and overwhelmed. The administrative team and staff members wanted to develop a plan for addressing social and emotional development and challenging behavior that would increase time for instruction, encourage more positive interactions with children, provide ongoing training and support for staff, and involve families.

After considering different approaches, the team decided that a program-wide system of Positive Behavior Support (PBS) would include all of the components they were looking for including instruction and promotion of positive social behavior, prevention of challenging behavior, and individual supports for children with persistent challenging behavior as well as supports for teachers and staff. The principal and other administrators were instrumental in the development of PBS at Valeska Hinton. This was critical because it took a great deal of time and resources to develop the plan. The administrative team contacted staff from the Center on the Social and Emotional Foundations for Early Learning (CSEFEL) to assist with the development of the plan. A CSEFEL staff person facilitated the development of the plan. A PBS Leadership team was formed and included the administrative team members as well as staff representing the variety of programs, ages of children, and staff positions in their school. The team met at least monthly to develop the plan. Families were kept informed throughout the process and were invited to participate in the development the PBS plan. Updates and opportunities were provided at monthly parent meetings. One set of parent teacher conferences focused on sharing program-wide expectations with families.
The Leadership Team identified *Together We Can* as the name for their initiative and began work on developing program-wide expectations. Staff members said that the process of identifying developmentally appropriate expectations gave them the opportunity to explore their own beliefs and philosophies about how young children develop and learn. After many hours of engaging debates, the group chose three program-wide behavior expectations: *Children and adults at VHECEC are expected to be respectful, be safe and be team players*. An important lesson for the staff learned through this process was the need to establish expectations for both children and adults. Thus, their program wide expectations meant a commitment to holding themselves accountable for the expectations not only in their interactions with the children but in their interactions with their colleagues and with families.

The team decided to develop a timeline for teaching the expectations but did not expect all teachers to teach and acknowledge the expectations in the same way. This was important in terms of addressing the unique developmental needs of children in preschool to first grade. Strategies for teaching the expectations were generated including integrating the expectations into their use of the Second Step curriculum, modeling and role-playing expectations, and taking and discussing photos of students demonstrating the expectations. A variety of strategies were developed to recognize positive, prosocial behavior including verbal descriptive feedback (e.g., “Thank you for being safe on the playground today when you walked around the swing”), photos of the children engaged in the expectations displayed on a bulletin board in the center court of the building, and a book developed by a class that included pictures and descriptions of children engaging in the expectations. Next, the team focused on developing the program’s capacity to develop
plans for supporting children with the most significant problem behaviors. The team
developed a plan for what teachers would do when they needed immediate help (e.g.,
when behavior was immediately dangerous and/or overly disruptive) as well as a process
for developing individualized support plans. For immediate help, classroom staff could
call the office to request that a support person come to the classroom right away to help
with the situation. The support person was supposed to help with the classroom while the
teacher dealt with the individual child. A form was developed which teachers were to
complete to indicate how useful the assistance was. The goal was to decrease crisis
situations. In addition, a process was developed for addressing the needs of children with
ongoing challenging behavior. Staff were trained in conducting observations, gathering
information (including family and staff), developing behavior hypotheses, and writing a
behavior support plan for a child.

VHECEC had a commitment to effective approaches to professional development
including having a professional development staff member to coordinate all professional
development activities. A variety of professional development activities were planned
and implemented related to the PBS initiative. A series of inservice workshops were
conducted for all staff members (i.e., support staff, associate teachers, teachers, student
teachers, administration) on the topics of (a) positive relationships with children, families,
and colleagues, (b) classroom preventive practices, (c) social and emotional skills
strategies and (d) intensive individualized interventions. This series followed the
components of the Teaching Pyramid described above (Fox et al., 2003). Second, the
team developed a plan for how they would orient new staff to the model as they were
hired. Finally, the professional development coordinator and lead teacher made
themselves available to support teachers as they implemented these strategies in their classroom.

Once the plan was developed, the work group took more of an advisory role. They met regularly to review the plan, arrange professional development activities for staff, students and families, and advise the administrative team. Some of the outcomes of the PBS approach at Valeska Hinton include: school-wide agreement and focus on positive behavior support, an increased feeling of unity among staff members, shared common language surrounding children’s behaviors, and a reduction in children being “sent (taken) to the office”.

While the initiative at VHECEC produced some important outcomes, they did not develop a comprehensive data collection system for use in monitoring implementation and outcomes. The team conducted staff surveys and kept records on calls to the office for crisis help, the development of plans for individual children, and staff satisfaction. However, data were not collected or summarized on a regular basis nor were data used for decision making in a systematic way.

Iowa Initiative for Program-wide PBS. In 2006, state education officials became interested in the application of program-wide positive behavior support (PBS) to early childhood programs following the states’ extensive and successful engagement in school-wide applications of PBS. Since 2002, schools in Iowa have been systematically expanding their implementation of SW-PBS within elementary and secondary schools with the support of Department of Education technical assistance providers and national consultants. Iowa was excited about the outcomes they had experienced with
implementing SW-PBS and was interested in bringing this approach to their preschool classrooms within public schools, community child care, and Head Start programs.

The early childhood program-wide effort began in the fall of 2006 with the training of leadership teams from 14 Head Start programs in a variety of communities across the state. Each leadership team included an Area Education Agency (AEA) technical assistance provider who was familiar with SW-PBS and charged with providing training, consultation, and other educational services to local programs. The structure of program leadership teams mirrored the requirements of SW-PBS initiatives with the requirement of administrative support, teacher representation, the use of data-based decision making and a commitment to a multiple year systems change process. The leadership teams were provided with a 3 day workshop on the essential features of program-wide PBS and the activities involved in adoption and implementation. Teams returned to their programs and worked with AEA personnel in the adoption of the model. Teams were provided with an evaluation package to collect ongoing data on their implementation progress and program outcomes. The evaluation package included the use of an Early Childhood Benchmarks of Quality to track program-wide implementation and the Teaching Pyramid Observation Tool (TPOT) to track classroom implementation of the Teaching Pyramid model. Teams were provided with a mechanism to track program incidents (e.g., calls to families, behavior consultations) and behavior incidents. Behavior incident tracking involved a data system that provided teams with a visual analysis of the incidents over time and by other factors (e.g., location, teacher, type of behavior) that could be used by leadership teams for data based decision making. Teachers also completed the Social Skills Rating
System (Gresham & Elliot, 1990) to identify children who were at-risk or had significant concerns. The SSRS also provided a measure that could be used to track child outcomes.

The assistance provided to Iowa teams was locally determined. Consultants provided the initial 3-day team training and several team implementation workshops during the year. Workshops during the year focused on implementing the evaluation plan and the use of individualized positive behavior support process for children with persistent challenges. Each team was provided with training materials on the Teaching Pyramid and was instructed to develop individualized professional development plans on implementation of the teaching pyramid and to provide general training on the teaching pyramid model. Leadership teams were instructed to meet monthly to guide implementation efforts and review data.

In the initial year of implementation, programs were encouraged to ensure that teachers were making progress in implementing the Teaching Pyramid model and that the program was developing the universal elements that provide a program-wide focus on promoting expectations and implementing systems for supporting children with behavioral challenges. Data from the first year indicate that classroom teachers improved in the implementation of the Teaching Pyramid model as measured by the Teaching Pyramid Observation Tool (TPOT) and that program teams made progress in the implementation of the model as measured by the Early Childhood Benchmarks of Quality. Programs reported that they found the TPOT to be helpful in identifying where teachers needed support to improve practice and the identification of individual and program-wide professional development activities.
Data collection was a challenge for the Iowa programs as Head Start has many reporting requirements and practitioners in the program have limited training and experience in the use of data for making decisions and tracking outcomes. The programs began using the Behavior Incident Report (BIR) (described above) to track children’s challenging behavior and to gather analytic information that could assist in problem solving the factors related to incidents of challenging behavior. In the first year of implementation, half of the programs were able to use the BIR productively and half the programs were inconsistent in their use of the system. All of the programs collected child assessment information on social skills and problem behavior using the Social Skills Rating System (SSRS) (Gresham & Elliot, 1990). The programs used the SSRS information to identify children in need of targeted and tertiary interventions. One of the programs was able to gather pre and post measures using the SSRS to document child growth in the first year. That program showed evidence of growth in implementation on the Benchmarks and TPOT and documented a statistically significant change in the overall average standard score in children’s social skills and a meaningful decrease in the average standard score for problem behavior.

In 2007, a second cohort of programs applied to participate and have received training on implementation and evaluation procedures. This cohort includes Head Start programs, private community child care programs, and public school classrooms. As the state expands its efforts in program-wide adoption, it is also building statewide capacity to offer training in the Teaching Pyramid model. State leaders from the various early childhood programs and initiatives (e.g., Head Start, child care, special education, child care resource and referral, higher education, etc.) have formed a state leadership team to
work in partnership with the Center on the Social Emotional Foundations for Early Learning to develop a cadre of trainers who can provide training and technical assistance in the implementation of the Teaching Pyramid model.

Summary and Future Directions

Over the last five years, we have made substantial progress in articulating and implementing a model for program-wide positive behavior support in early childhood settings (Fox & Little, 2001; Hemmeter et al., 2006; Hemmeter et al., 2007) and have engaged in national efforts with numerous colleagues to facilitate the adoption of the Teaching Pyramid Model as a framework for promoting young children’s social emotional development and addressing challenging behavior through two federally-funded national centers (Center on the Social and Emotional Foundations for Early Learning, www.vanderbilt.edu/csefel and the Center for Evidence-Based Practice: Young Children with Challenging Behavior, www.challengingbehavior.org). These efforts have built on the current data base of effective early childhood intervention practices and a careful translation of the pioneering work of the school-wide positive behavior support model (Hemmeter et al., 2006). As we have worked within early childhood programs, there have been several lessons learned and challenges associated with the model. These are described below.

School-wide and district-wide PBS involves core features, approaches to intervention, processes for adoption, and the measurement of outcomes that overlays on a fairly uniform setting; a school or school district. In early childhood applications, the settings may be quite varied and do not involve standard features. For example, we have worked with small child care programs, large programs with multiple centers and services
(including home consultation), public school classrooms, and public schools. Within these settings, there may or may not be resource personnel, data collection systems, professional development resources, and behavior consultation expertise. The diversity of these programs translates into model adoption efforts that are often idiosyncratic to the setting. In addition, we have yet to work in an early childhood program that uses a standard process for noting when a child has problem behavior and needs support or intervention. The lack of the office discipline referral as a measure that is common to the program or a similar measure that can be used as an analytic tool or to gauge a program’s progress has been a challenge for implementation.

In SW-PBS, the assessment of whether universal interventions are in place considers whether a team has been established, expectations have been taught and are monitored, problem behaviors are being prevented and discouraged, and data are used for decision making (Horner et al., 2005). In early childhood implementation, while there is an emphasis on program-wide expectations and systems for data based decision making and team implementation, the prevention power of the Pyramid Model is predicated on the implementation of the practices associated with the model by individual teachers within their classrooms. In our efforts toward program-wide implementation, we have focused on ensuring that the Teaching Pyramid Model is being implemented with fidelity within every classroom. The Teaching Pyramid Model describes the practices and processes that teachers should use to support the social development of all children and to address the social and behavioral needs of individual children. It is the consistent delivery of these research-based strategies that leads to improved outcomes for all children.
We have also found it necessary to support programs in implementing all tiers of the model simultaneously to ensure that children with persistent challenges can continue to be enrolled in the program and receive services. Without the safety net of an entitlement to education, young children who pose behavior challenges are at significant risk of being expelled from their current placement. In order to ensure that an assessment-based process for developing behavior support plans is a part of the program-wide effort, we have guided leadership teams to identify internal resources for making this a systematic part of the program or to partner with a consultant (e.g., behavior specialist, mental health consultant) to offer these supports. We have also provided training in the individualized behavior support process to all program staff with more targeted training to staff members who will serve as behavior support facilitators.

As the Teaching Pyramid Model has increased in its national visibility as a framework for supporting social emotional development and addressing the challenging behavior of young children, there have been numerous inquiries about its fit for preschool classrooms within schools that are implementing school-wide PBS. It is our hope that the Teaching Pyramid Model framework nests neatly within a school-wide effort and can be recognized as the approach to instruction and behavior intervention that should be used within preschool classrooms.

In our program-wide implementation work, we have identified some challenges that will inevitably lead to refinements in the model. We have found that early childhood programs have very limited experience with teaming at a program level and developing systems for innovation sustainability. While the notion that teachers work together at a committee level to implement an innovation or initiative in schools is common; this
opportunity is rare within early childhood programs. This has important implications for the training and support of a program leadership team. Another challenge that must be noted is the adoption of data collection systems that are meaningful for use with young children and yield data that can guide the refinement of the model. While we have experienced some success in developing data systems that programs are using; many programs have a difficult time integrating simple data collection measures into their ongoing procedures.

Despite these challenges, we have been encouraged by the enthusiastic interest in program-wide PBS by early childhood educators, programs, and policy makers. We have received an overwhelming response from state systems who wish to build the capacity of their professional development systems to ensure that training and coaching in the Teaching Pyramid model is available within their early care and education programs. Over the last 5 years, there has been a crescendo of activity in states focused on the development of models for addressing young children’s behavioral challenges and mental health concerns. Program-wide adoption of the Teaching Pyramid has been welcomed as an approach that can be implemented by early educators within their daily nurturance of young children. We are confident that over the next few years, data from programs that are implementing this model will demonstrate its value.
References
misbehavior in day care: Untangling causality with correlational data. *Developmental
Psychology, 34*, 276-287.

preschool: 2006 state preschool yearbook*. Rutgers: The National Institute for Early
Education Research, the State University of New Jersey.

Benedict, E. A., Horner, R. H., Squires, J. (2007). Assessment and implementation of
positive behavior support in preschools. *Topics in Early Childhood Special


Bodrova, E., & Leong, D. J. (1998). Development of dramatic play in young children and
its effects on self-regulation: The Vygotskian approach. *Journal of Early Childhood

early childhood programs* (Rev. Ed.). Washington, DC: National Association for the
Education of Young Children.

of social emotional and behavioral problems in a community sample of 1- and 2-year-old
811-819.


Committee on Early Childhood Pedagogy, Commission on Behavioral and Social Sciences and Education. B. T. Bowman, M. S. Donovan, & M. S. Burns (Eds.) Washington, DC: National Academy Press.


Figure 1. The Teaching Pyramid Model.