

How Curriculum Frameworks Respond to Developmental Stages: Birth through Age 8

Diane Trister Dodge & Toni S. Bickart

Abstract

An early childhood curriculum should offer educators a vision of what an age-appropriate program looks like and a framework for making decisions about how to achieve that vision. This paper describes three frameworks that acknowledge the different needs and abilities of infants and toddlers, preschool and kindergarten children, and children in grades one through three. Infants and toddlers are at the stage of establishing trust and autonomy. Because these issues are addressed in the context of relationships, the paper emphasizes relationships as the focus of decision making. Three- to 5-year-olds are at the stage of initiative. They like to have choices, to come up with ideas for using materials and for play. Thus, an environmental approach is used, and five components—philosophy, goals and objectives, the physical environment, the teacher’s role, and the parent’s role—are defined and applied to the physical environment as the setting for learning. Six- to 8-year-olds are at the stage of industry. They are increasingly product oriented, want to do a job well, and want to feel competent as learners. The framework described in this paper has six strategies: (1) knowing the children, (2) creating a classroom community, (3) establishing a structure, (4) guiding children’s learning, (5) assessing children’s learning, and (6) building a partnership with families.

There is now more research on how people learn and specifically on how young children learn than we have ever had before. This research has led to widespread debates in both the general public and media as well as the profession about curriculum and pedagogy. Frequently missing from the debate, however, is an understanding of how teachers make decisions in the classroom.

High-quality programs are planned and implemented by people who are skilled and knowledgeable about young children and how they learn. But even the best trained professionals find it beneficial and appropriate to teach in early childhood programs that use a curriculum as a focus for learning. An early childhood curriculum offers educators a vision of what an age-appropriate program looks like and a framework for making decisions about how to achieve that vision.

Curriculum in early childhood is defined as “an organized framework” that includes three components (Bredekamp & Rosegrant, 1992, p. 10):

- **Content**—This component is the subject matter of the curriculum, the goals and objectives for children’s learning.
- **Processes**—This component is the pedagogy of learning, how teachers teach, and the ways in which children achieve the goals and objectives of the curriculum.
- **Context**—This component is the setting, the environment in which learning takes place.

Each of these components, to be implemented well, requires a knowledge of how children develop and learn at each stage of development; their individual strengths, interests, and needs; and the social and cultural contexts in which they live (Bredekamp & Copple, 1997, p. 9). These dimensions of learning, known as developmentally appropriate practice, guide all aspects of teaching and learning. When teachers understand developmentally appropriate practice, they can use this information to guide children’s learning.

At each stage of development, there are issues of central importance to the healthy growth of children. Therefore, we have created three frame-

works to acknowledge the different needs and abilities of infants and toddlers, preschool and kindergarten children, and children in grades one through three. We base our curriculum frameworks on Erik Erikson's stages of socioemotional development (Erikson, 1963).

Infants and toddlers are at Erikson's stage of establishing *trust* and *autonomy*. Because these issues are addressed in the context of relationships, we emphasize the relationships caregivers/teachers have with children as the focus of decision making.

Three- to 5-year-olds are at the stage of *initiative*. They like to have choices, to come up with ideas for using materials and for play. Thus, we use an environmental approach and design each interest area as a laboratory for exploring, trying out and sharing ideas, and creating representations.

Six- to 8-year-olds are at the stage of *industry*. They are increasingly product oriented, want to do a job well, and want to feel competent as learners. In a structured community of learners, teachers can give children opportunities to investigate, represent, and reflect on what they are learning.

Strategies for teaching grow from learning principles moderated by this information about stages of development. Purposeful teaching and learning occur when this knowledge is put into practice through curriculum.

A Curriculum Framework for Infants and Toddlers

The first three years of life are critical to a child's healthy development. Research indicates that more rapid brain development takes place during these years than at any other time of life. During this period, children are discovering who they are, how others respond to them, and in what ways they are increasingly competent. They are also learning how to relate to others, what it means to express their feelings, and whether they are loved. Their brains are being "wired" into patterns for emotional, social, physical, and cognitive development.

For infants and toddlers, development occurs in all of these areas as they use their senses to gain a sense

of security and identity and to explore the people and objects in their world. Too often, curriculum guides for infant/toddler programs emphasize intellectual stimulation above other critical areas of development. The availability of books promising to build superior minds are plentiful, as are toys designed to teach lessons and skills to even the youngest infant. But what is important in meeting the developmental needs of infants and toddlers can be found in the responsive relationships children build with the important adults in their lives.

An appropriate curriculum for infants and toddlers focuses on what is most essential for their healthy growth and development: a caregiver/teacher who builds responsive relationships with children and families. The curriculum should provide the big picture of what high-quality programs look like and should provide a framework for making decisions based on knowledge of child development, observations of children, and thoughtful reflection. It should define where to lead each child and family and provide a guide as to how to get there.

The Creative Curriculum for Infants & Toddlers (Dombro, Colker, & Dodge, 1997) is one example of an appropriate curriculum for very young children. Like all formal curriculum models, it outlines what children learn during the first three years, the experiences through which children achieve these learning goals, what staff and parents do to help children reach these goals, and the materials and setting needed to support implementation. Figure 1 shows what the curriculum looks like graphically. The triangle within a circle emphasizes the importance of building responsive relationships among caregivers/teachers, children, families, and the community in the context of daily routines and activities.

Caregivers/Teachers

Caregivers/teachers are the foundation of the curriculum, and the framework empowers them as decision makers. Inside the triangle are all the steps involved in creating and maintaining a high-quality program. The caregiver/teacher creates a warm, inviting environment, ensures that children are safe, and follows practices that promote children's physical and mental health and learning. Children receive positive guidance about behavior. Planning and evaluation are

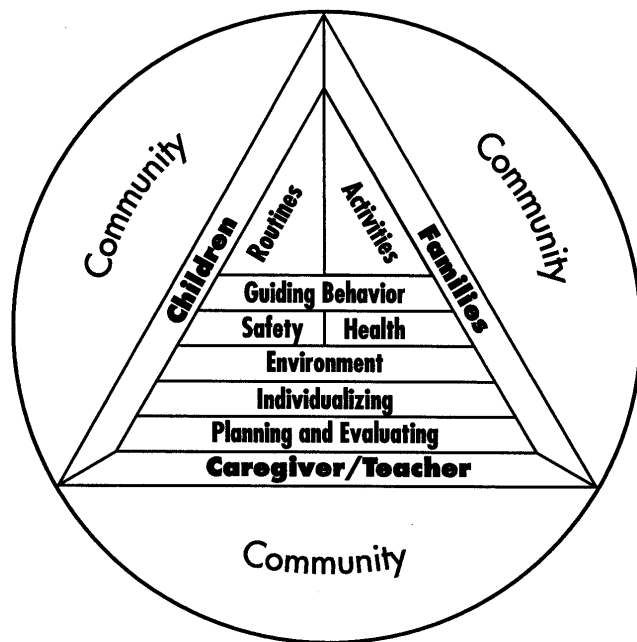


Figure 1. A curriculum framework for infants and toddlers.

ongoing. The program is individualized based on what is learned about each child and family through observations and daily interactions.

Daily Routines

Much of the teacher's day revolves around the five routines of (1) hellos and good-byes, (2) diapering and toileting, (3) eating and mealtimes, (4) sleeping and naptime, and (5) getting children dressed. Each of these routines is used as an opportunity to build relationships with children and promote learning. For infants and toddlers, it is during these routines that learning takes place and they begin to show trust in the world.

Activities

Caregivers/teachers consider the stages, abilities, and interests of the children in their care and, taking their lead, plan appropriate activities and experiences. They arrange opportunities for children to imitate and pretend, play with toys, dabble in art, enjoy stories and books, taste and prepare food, explore sand and water, have fun with music and movement, and go outdoors. As children grow and expand their interests and gain greater ability to interact with their environment, activities become increasingly important as the focus of learning.

While this picture provides a visual framework, the curriculum itself provides a guide for decision making each day. It offers practical information about an appropriate environment for young infants, mobile infants, and toddlers—one filled with materials and experiences that will interest them. Infants and toddlers who feel safe and secure in their relationships with adults are eager to reach out and explore their world. Observing how each child responds to and uses the environment, teachers ask questions such as:

- What interests this child? How can I nurture her curiosity?
- What skills is she working on? What materials and experiences might I make available or offer her?
- How does he typically approach the world? What is his personal style or temperament?
- What can I do to encourage his engagement?
- How does she respond to different sensory experiences? What can I do to protect her from over- or understimulation?
- How many books should I leave out for my toddlers to look at?
- Should I hand the teething ring to the baby or let her reach for it?

Having a curriculum framework gives teachers a way to follow each child's lead and make good decisions.

A Curriculum Framework for Preschool and Kindergarten

During the early childhood years, children are learning to trust others outside of their families, to gain independence and self-control, and to take initiative and assert themselves in socially acceptable ways. At the same time, they are learning about their world by observing their surroundings and finding out what happens when they interact with materials and other people. Their language skills grow enormously. They develop the ability to talk about their observations and experiences as they explore their immediate surroundings. Their environment becomes larger and richer as they learn to understand others and express their ideas more effectively. While they are working

on these social, emotional, and cognitive skills, they are making great strides physically—running, skipping, jumping, hopping, climbing—and developing their fine motor skills as well.

These growing abilities enable children to make friends, work with others, and communicate with children and adults. We say they are at the stage of *initiative* because they are ready to reach out to others as they explore their world. Social and emotional competence is a key developmental goal for this age. Research confirms that “social and emotional school readiness is critical to a successful kindergarten transition, early school success, and even later accomplishments in the workplace” (Peth-Pierce, 2000, p. vii). The National Education Goals Panel (1999) describes these key social skills as “respecting the rights of others, relating to peers without being too submissive or overbearing, being willing to give and receive support, and treating others as one would like to be treated” (Peth-Pierce, 2000, p. 1).

An appropriate curriculum for preschool and kindergarten children therefore provides a way to build social and emotional competence at the same time as children learn important concepts, information, and skills (Bowman, Donovan, & Burns, 2000, p. 8). Traditional curriculum resources for preschool programs too often focus on “busy-work” activities, offering pre-packaged lessons, a different theme each week, and ditto sheets. In addition to promoting inappropriate practices, these resources take the focus away from the child.

Rather than simply listing activities, games, or songs for teaching, an appropriate curriculum addresses children’s need to demonstrate initiative and focuses on creating an environment where children can interact, explore, and make choices. The richer and more interesting the environment, the more opportunities there are for children to learn. The teacher watches how children are using the materials and listens to what they are saying in order to understand how they are thinking. Then the teacher supports children’s learning by adding new materials, asking open-ended questions, or teaching a particular skill that will help them explore further.

The Creative Curriculum for Early Childhood (Dodge & Colker, 1992) is a curriculum framework

for preschool and kindergarten children that builds on what we know about how children learn and the particular developmental needs of this age group. There is clear direction for teachers about setting up the environment and guiding children’s learning.

The framework has five components: (1) How Children Learn, (2) What Children Learn, (3) The Physical Environment, (4) The Teacher’s Role, and (5) The Parent’s Role (see Figure 2). Whereas the foundation for an infant/toddler curriculum is in the relationship that the caregiver/teacher builds with children and families, the organizing principle for preschool and kindergarten curriculum is the physical environment of the program. In the center of the graphic are interest areas that organize the environment for children. But before these interest areas can be arenas for important learning, various elements are essential to support a framework for decision making.

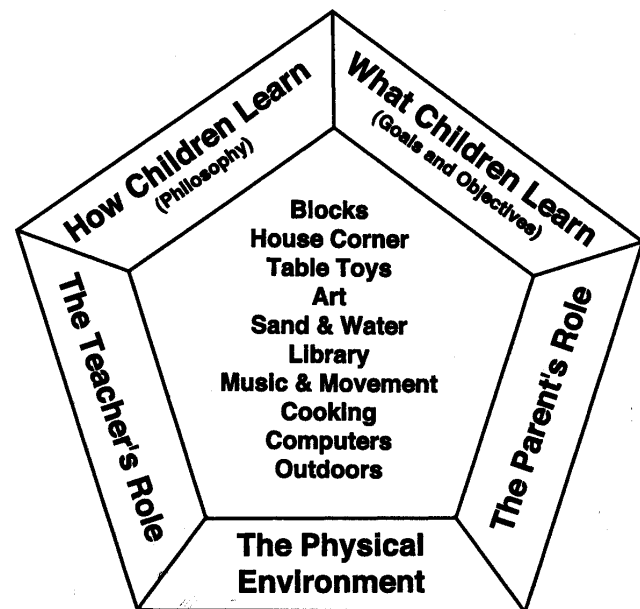


Figure 2. A curriculum framework for preschool and kindergarten.

How Children Learn

A clear philosophy about how children learn requires an understanding of developmentally appropriate practice and new understandings of appropriate pedagogy. Curriculum should be based on knowing the normal sequences of growth typical of 3- to 5-year-old children in all areas of development. As

active, social individuals, they have lots of ideas they want to try out and share.

While children connect new information to their existing understandings, current research is expanding our interpretations of when and how children begin to be able to go from concrete to abstract learning (Bowman, Donovan, & Burns, 2000, p. 4). Teachers can expose children to decontextualized language that is more complex and abstract when they get them to think about something beyond the here and now (Neuman, Copple, & Bredekamp, 2000). For example, children building bridges in the block area might be asked to recall and talk about their recent visit to a drawbridge, describing what they remember seeing. Getting to know children as individuals with unique strengths, interests, and talents, as well as responding to the social and cultural context in which they have been raised, enables teachers to know when and how to expose children to new learning opportunities and build their competence.

What Children Learn

The goals and objectives for learning are the road map of an early childhood curriculum. They provide the direction for planning the program and a way to determine what children know and how they are developing. This information enables teachers to respond to each child individually, to build on strengths and focus on skills that need strengthening. A high-quality curriculum focuses on all aspects of development and links these with the content knowledge and skills appropriate for this age group.

Specific social/emotional goals include developing a sense of self, responsibility for self and others, and prosocial behavior. In the area of physical development, there are goals in both gross and fine motor skills. Cognitive development includes learning and problem solving, logical thinking, and representation and symbolic thinking. At this age, language development becomes particularly important to support and enhance. Listening and speaking and reading and writing goals are articulated with specific objectives that children are expected to master. What children learn in preschool and kindergarten has a direct link to the content and skills learned in later grades. Therefore, it should be intellectually stimulating and worthy of children's time.

The Physical Environment

As the “textbook” for the curriculum, the physical environment is the vehicle through which children learn. The curriculum's guidance enables teachers to make decisions about indoor room arrangement and outdoor spaces, what materials and equipment are appropriate, and how they should be grouped and displayed.

The Teacher's Role

An appropriate physical environment structures the educator's role in promoting children's development and learning. But it is not enough to set up attractive, well-organized, and rich interest areas. Teachers must know how to select and arrange materials and how to interact with children so that they acquire the knowledge and skills to become successful learners. They need a good understanding of what materials will interest and challenge children and the skills to observe how each child uses the environment in order to plan for individual growth and learning. A knowledge of the continuum of skill development is essential in order to challenge children so that they are always progressing. Learning how to support children in making choices, what to say to help them clarify their understanding, and how and when to ask open-ended questions—“What do you think will happen if...?” “How many different ways can you...?” “Why do you think that happened?”—are all important aspects of the preschool and kindergarten teacher's role.

The Parent's Role

The most effective early childhood programs are those that involve children's families in meaningful ways. This is why the last component of curriculum addresses the role of parents. Although a teacher's primary role is to work with children, the needs of the child are always best met when parents are also actively involved and an integral part of the program. A partnership begins with mutual respect and trust. Staff who convey the message that parents are welcome and encouraged to visit the program set the tone for a positive relationship. Participating in the program enables parents to observe firsthand how their children are progressing so they can support and extend their learning at home. When teachers take

time to learn about the child and family, they can often develop ways to extend the learning at home. Teachers who explain developmentally appropriate practice to parents, acknowledge their concerns about their children, and build confidence and pride in what their children can accomplish gain valuable allies in the effort to support high-quality preschool and kindergarten programs.

Interest Areas

With this framework in place, the interest areas of the classroom become the laboratory for children to investigate, reconstruct, and share what they are learning. As children work with blocks, engage in dramatic play, manipulate sand and water, use table toys, explore the library, participate in music and movement activities, explore art materials, cook, use computers, and play outdoors, they learn concepts and skills in literacy, math, science, social studies, the arts, and technology.

Using *The Creative Curriculum* framework helps teachers answer questions such as the following:

- Does the room arrangement support positive behavior?
- How can I help children to use materials more carefully and clean up?
- Are children learning through their play?
- How can we make transitions occur more smoothly?
- Is this a good time to introduce new props, learning materials, books, or toys?
- How can I encourage children to do more writing?
- What would be a good topic for our next study?

What to teach and how to teach it become part of a unified whole with a curriculum framework that enables teachers to see the big picture at the same time as they address individual needs of children.

A Curriculum Framework for First, Second, and Third Grades

The foundation for good teaching is knowing about children. Six- to 8-year-olds have their own particular

characteristics. They are defining who they are based on certain simple attributes or achievements, such as: “I wear glasses.” “I’m good at soccer.” “I can read books with chapters.” Many think about how they look in the eyes of others and become increasingly self-conscious. Establishing friendships is very important, although they sometimes lack the skills to do so successfully. A delightful characteristic of this age is the emergence of a sense of humor, and telling jokes is a popular pastime. Children this age also become less dependent on adults and more dependent on peers. As this change occurs, children may begin to question authority and test limits.

While there are predictable patterns of development, it becomes very obvious at this age that children do not grow and develop at the same rate. Some may be more or less coordinated; one child may be extremely verbal with a large vocabulary, while another says little. In addition, an individual child’s development does not follow an even course across all areas: a 6-year-old may have the fine motor skills of some 7-year-olds but the language skills of some 5-year-olds.

Erikson describes this stage in terms of a positive and negative attribute. The positive attribute, *industry*, means children want to take on tasks and have something to show for their efforts. They know when they have done a job well and do not need empty praise. Competent children are sure enough of themselves to take risks and to struggle with challenges in order to reach a goal, solve a problem, or complete a task. When children do not achieve a positive sense of industry, they feel inferior (“I can’t do it.”). Erikson’s theories explain how important it is for teachers to provide children with appropriate challenges so they can feel successful.

Because expectations for what primary grade children need to know and do have greatly expanded in the past decade, instructional planning for this age group must consider how to set up knowledge-centered environments where children are actively engaged in the learning process (Donovan, Bransford, & Pellegrino, 1999). In such environments, teachers consider what children already know about a given subject and how to help them to construct new understandings based on that knowledge. They provide feedback to children throughout the learning

process, trying to guide children to make sense of new information, not just to memorize it.

Building the Primary Classroom (Bickart, Jablon, & Dodge, 1999) is built around six strategies that provide teachers with a framework for making decisions about their work with children at this stage of development. As you can see in Figure 3, at the center are the content areas of instruction—Language and Literacy, Mathematical Thinking, Social Studies, Scientific Thinking, Technology, and the Arts. Surrounding these content areas are the strategies that teachers implement so they can effectively teach content and give children opportunities to demonstrate industry using the skills they are learning.

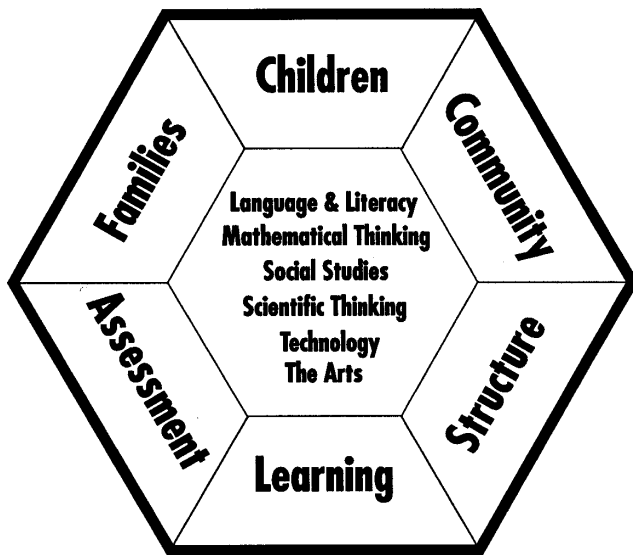


Figure 3. A curriculum framework for the primary grades.

Knowing the Children

This strategy means understanding developmental stages, individual characteristics, and the influence of culture. Because every group is unique, teaching and learning are dynamic processes shaped in part by the attributes and interests of each group of children. Teachers use what they have learned about the children they teach to make decisions about what to teach when and how to teach it.

Building a Classroom Community

This strategy is key to creating an environment where children can explore and be productive. When a

classroom functions as a community, children experience a sense of belonging and a sense of empowerment that are essential to their well-being and their academic success. Teachers build a community through having varied kinds of meetings or full-class gatherings during the day:

- meetings to start the day together;
- meetings for group discussions—about classroom life (rules, jobs), about a problem or issue and coming up with a solution;
- meetings to introduce a lesson or material or to discuss what has been learned;
- meetings at transition times to be a bridge between one activity and another; and
- end-of-day meetings to help children make a transition from the classroom community to another community.

Teachers also build community by helping children learn to work collaboratively and teaching children social problem-solving skills.

Establishing a Structure for the Classroom

An explicit structure enables teachers to facilitate children's learning and helps children to become self-directed learners. The kind of structure teachers create depends upon the kind of learners they want children to become. In a collaborative community where children are encouraged to become self-directed learners, all members of the community should contribute to creating the structure that governs community life.

Six- to 8-year-old children, who typically need to feel autonomous and powerful, can become invested in building and maintaining the quality of community life. They can understand rules and systems when they help to create them, and they are willing to reevaluate and change what does not work for the good of all. Teachers can create a structure with children in which they share responsibility for keeping the classroom neat and orderly, know how to get and use materials properly, and function with increasing levels of independence. Structure comes from a well-organized classroom environment, a daily schedule and routines that are predictable, and clear expectations about behavior in the classroom.

Guiding Children's Learning

In a classroom community where children feel empowered to learn, teachers can create opportunities for children to acquire skills and content as they actively investigate, represent, and reflect on their increasing understanding of the world around them. They establish a “culture of inquiry” in which preconceptions are addressed and children convert facts into “usable knowledge” that is applied to new content (Donovan, Bransford, & Pellegrino, 1999, p. 2). When children are engaged in meaningful learning, they see a connection to the real world. The projects assigned, topics studied, and the lessons taught are both interesting and relevant to children.

Children have active learning experiences in which they handle materials, interview people, take trips, and do personal research and experiments that allow them to move from the concrete to more abstract levels of learning. Because they benefit from being challenged, teachers engage them in work that requires time to study and explore issues in depth. Assignments and lessons do not all look alike or require the same kind of product. Teachers organize the curriculum using an integrated approach that allows children to apply skills they are learning in reading, writing, math, science, social studies, technology, and the arts.

Assessing Children's Learning

A comprehensive approach to assessment enables teachers to make informed decisions about what to teach, plan instruction, and monitor and share children's progress with families in a meaningful way. They must observe children regularly and collect samples of their work. The work that primary grade children do every day—writing stories, making maps, creating paintings, solving math problems—is the best and most logical source of assessment information for both teachers and children. Gathering assessment information from daily activities provides an accurate and complete picture of what children know and can do.

Because primary grade children are deeply invested in what and how everybody else is doing and how they measure up, they should be involved appropriately in the assessment process. Children need to know exactly what is expected in a given assignment, get specific feedback on their work, and be able to

describe the ways in which they have made progress over time.

Building a Partnership with Families

When families are involved, children's achievement is enhanced, teachers obtain support, and schools become better places for learning. Teachers involve families by taking time to learn about each child's family, involving families in the school and classroom community, establishing a structure for ongoing communication, sharing the curriculum, and involving families in the assessment process.

Teachers use the six strategies as the foundation that makes subject matter teaching meaningful and effective. Knowing the children helps teachers plan where to begin, which materials to choose, and what questions to ask. The classroom community that is created enables children to work in small groups, to share supplies, and to feel safe taking risks. The structure that is established enables children to work independently because they anticipate the day's events, understand classroom rules, and know how to find, use, and put away materials. The approach to guiding children's learning helps them construct their own understanding within each subject area. The approach to assessment offers many ways to find out what children are learning so that teachers can modify instructional approaches in order to address individual needs. Involving family members in homework and class projects that call for real-life application of skills and concepts enhances children's learning.

The framework remains constant so that teachers can use it to make appropriate decisions. They can consider:

- Do the displays reflect what children are studying?
- Am I building listening and speaking skills during class meetings?
- Do children have enough opportunities to make choices about how they represent what they are learning?
- How can I get children to do more editing of their writing?
- What would be a good way to incorporate math skills in our study of bridges?

- The math materials are not being kept organized. How can I get the children to address this problem?
- Are the small group science investigations allowing everyone to learn important skills?

Balancing children's needs and the demands placed on teachers to focus on facts, skills, and concepts is difficult for teachers. With this framework in place, the best elements of classroom management, instructional practices, and curriculum content teaching can be combined effectively.

The Challenge before Us

This paper has presented three curriculum frameworks that respond to developmental stages of children from birth through age 8. The adoption of an appropriate curriculum framework is only the first step. Curriculum implementation requires a long-term investment. It starts when program administrators adopt a curriculum that is consistent with their vision of high-quality services for children and families. Ongoing professional development and time for planning and reflection are essential if staff members are to become thoroughly familiar with the framework, knowledgeable about developmental stages, and able to construct a daily program that promotes each child's development. Equally important in implementing a curriculum is involving families in planning and learning about the approach.

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