What Can Teachers Do to Get All Children Ready for Kindergarten?

Strategies for Readiness in Each Developmental Domain

Ready Child + Ready Family + Ready School = Successful School Readiness

This 2006 definition expanded understanding of school readiness to recognize the influence of families and schools on young children. This group of papers focuses on the Ready Child developmental domains. The All Children Ready for School series combined information from research literature and the authors' practical knowledge of the topics. Each is a four page paper.

- Bibliography for the Series.
While Luis is hard at work on that puzzle, he is demonstrating important skills that will serve him well when he enters kindergarten next year: the ability to “stick with it” and persist with a task, especially when it is challenging; the disposition to try something different when the first strategy doesn’t work; and the self control he maintains in keeping his attention on the task when it would be easier to see what else is going on in the classroom.

When we think of what early educators can do to prepare children for kindergarten and school, we tend to think of the skills and knowledge they may teach children to get them ready for kindergarten. This may include knowledge of books and early literacy skills, basic concepts, social competence, and the ability to get along with others. Another important dimension, demonstrated by Luis, is how children approach and engage their learning environment.

Approaches to learning is one of five key dimensions of children’s school readiness identified by the National Education Goals Panel (1995). This facet of school readiness pertains to children’s inclinations, dispositions, and learning styles in using their knowledge and skills to interact with their learning environment. For example, when educators present children with new tasks or activities, do the children approach these novel undertakings with curiosity and enthusiasm or with caution and tentativeness? Do they persist in investigating and mastering the task or materials, or do they quickly move on to activities that are more familiar or less difficult?
Children differ in how they approach new and novel tasks, difficult problems or challenges, and teacher-directed tasks. An individual child’s approach to learning may have little association with his or her level of knowledge or skill. For example, children may have considerable knowledge and skills they can bring to bear on a task or activity; however, their inclination to use their skills may be influenced by their temperament (for example, shyness), the way they were raised (girls politely wait), or their cultural values (showing initiative may be considered rude).

Approaches to learning may vary in their origin (such as gender expectations, cultural patterns, learned approaches) and malleability. Some researchers believe that there are approaches to learning that reflect predispositions, and are shaped at birth or developed very early. These include temperament, gender expectations, and cultural patterns and values. Approaches to learning that are predisposed may be less conducive to change. Learning styles, however, are approaches to learning that reflect the child’s attitudes toward the learning process, and are much more malleable. Learning styles include openness to new tasks and challenges, initiative, persistence, reflection, imagination, and problem solving.

There is research that suggests strong links between positive approaches to learning and children’s success in school. For example, one study found that children with higher levels of attentiveness, task persistence, eagerness to learn, learning independence, flexibility, and organization, generally did better in literacy and math at the end of the kindergarten school year and the beginning of their first grade year. In addition, children who approach learning tasks or novel situations with these positive approaches to learning are better able to regulate their learning experiences, and more quickly acquire general knowledge and cognitive skills. A review of the literature identifies six key skills or learning dispositions that reflect important approaches to learning (Figure 1).

**Figure 1**

**Approaches to Learning: Important Learning Outcomes**

1. **Curiosity/Initiative.** The child chooses to engage and participate in a variety of new and challenging activities.
2. **Persistence.** The child is able to persist in and complete a variety of tasks and activities.
3. **Attention.** The child demonstrates increased attentiveness during teacher-directed activities.
4. **Self-direction.** The child is able to set goals, make choices, and manage time and effort with increased independence.
5. **Problem solving.** The child is able to solve problems in a number of ways, including finding more than one solution, exploration, and interactions with peers (Education Development Center, Inc., 2004).
6. **Creativity.** The child is able to approach tasks with increased flexibility, imagination, and inventiveness (Education Development Center, Inc., 2004).

How can early childhood educators promote these positive approaches to learning that successfully prepare young children for school? Research is scant in this area. Much of the information and recommended practices come from longstanding beliefs and traditions about young children’s learning and development. A review of this literature suggests four strategies.

- **Approaches to Learning included in the program’s curriculum.**

The first and most straightforward strategy is to make these positive approaches to learning a goal of early education, to include them as part of the program’s curriculum goals. This strategy is important because it emphasizes children’s capacity for change. While a child’s early temperament may be difficult to change, the approaches identified above are malleable and early educators can influence their presence in children. A child who is less persistent and unable to complete tasks can receive support and encouragement to nurture and strengthen this learning style. Children who are less organized in managing their time and efforts can receive the guidance and models for approaching tasks to increase concentration and organization skills.

- **Provide opportunities that elicit these skills.**

The second strategy for promoting positive approaches to learning is to include child-directed activities during the daily routine. By providing multiple activities from which children can choose, early educators offer opportunities for children to explore activities of their interest. This presents an environment in which children’s curiosity and initiative in approaching tasks is stimulated. It also gives children opportunities to practice how well they can self-direct and organize their time and actions. If the bulk of the activities planned by early educators are more teacher-directed, then children have fewer opportunities to initiate and practice their explorations, self-direction, or problem solving.
Challenge children with moderately difficult tasks. The third strategy involves choosing activities and materials that are moderately difficult and offer multiple possibilities for child interaction. In order to encourage children's curiosity and initiative, persistence, and problem solving, early educators should choose materials that are neither too easy nor too difficult for the child. If the materials are too easy and familiar, they may not grab the child's interest, and he or she will be less eager to explore. If the materials are too complex or difficult to interact with, children may quickly become frustrated and lose interest. Choosing activities and materials that are just beyond children's level of understanding and skill, and in which they have shown some interest, provides the necessary stimulus for children to approach challenging tasks with some eagerness and self-direction. Likewise, materials that offer more than one right way to interact provide the stimulus for problem solving and creativity.

Directly teach and support children to use these approaches. The first three strategies work to create opportunities that elicit the desired approaches to learning. The fourth strategy is the set of early educator behaviors and interactions that prompt, guide, support, and reinforce the child to engage in the desired approaches to learning. Early educators face the difficult task of providing the right amount of support without being overly directive and stifling. The goal is to prompt, suggest, and guide children's actions, without helping too much, to preserve the child's sense of self-direction and autonomy. Providing the right amount of support to scaffold children's interests and engagement, so they take initiative and persist on their own, is key. Early educators' encouragement, praise, and feedback in response to the child's actions communicate expectations, acknowledge the child's attempts and/or success, and provide language models for the child and other children to internalize and use to figure out and describe what happened.

Making These Practices Work for ALL Children: The Universal Design of Early Education

The strategies summarized above answer the question, “How can early childhood educators promote these positive approaches to learning that successfully prepare young children for school?” The next question to answer is, “What do early educators need to do to insure these strategies will work for all learners, regardless of differences in abilities, cultural and linguistic backgrounds, and economic status?” The focus of this section is on the universal design of early education—designing our physical, social, and instructional environments to ensure every child is able to participate, learn, and benefit (see Figure 2).

The principles of universal design are applicable to the field of early care and education because of the increasingly diverse groups of children entering into early childhood programs. We know that a one-size-fits-all approach simply will not work. We know that some children may struggle in learning specific skills for reasons related to their abilities, cultural and linguistic background, and economic status. We need to design or redesign our approach because although all children can learn and bring specific gifts to the classroom, some children may also face challenges due to their diverse backgrounds and ability levels.

Figure 2 offers suggestions for universally designing the recommended practices presented earlier.

Figure 2
Application of Universal Design Principles to Early Education

1. The design of the physical environment enables all children to have access and equitable opportunities for full participation in all program activities. This includes structures, permanent and movable equipment and furnishings, storage, and materials.

2. The design of health and safety program components minimizes risks and hazards for all children. It ensures all children, regardless of health status or condition, have ongoing access to early care and education by minimizing interruptions to their learning due to illness and injury.

3. The design of the social-emotional environment offers all children equitable access and full membership to the social-emotional life of the group, and supports their social-emotional development.

4. The design of the instructional environment enables all children equitable access to learning opportunities and multiple means for engagement and learning. This includes the curriculum, instructional practices, materials, and activities.

5. The design of individual assessment and program evaluation practices provides multiple approaches to finding out what children know and can do in order to equitably assess individual learning, development, and educational progress.

6. The design of family involvement practices supports the equitable access and engagement of all families in the full range of experiences. This includes ongoing communication, learning opportunities, and program involvement activities.
## Evidence-Based Practices

1. The early educator includes positive approaches to learning as part of his/her program’s curricular goals targeting what all children should be learning.

   - Recognize that all children need to acquire positive approaches to learning, including children with significant disabilities or from diverse cultural backgrounds.
   - Gradually introduce and teach children to learn positive approaches to learning, particularly children who have had minimal learning experiences.
   - Explain to families the importance of these positive approaches to learning (e.g., taking initiative, being independent, organizing and managing their time), and how they can encourage their children to acquire these dispositions.

2. The early educator balances teacher-directed with child-directed activities to provide children opportunities to take the initiative in exploring their environment and to organize and manage their time and effort.

   - Design the physical environment to enable all children to engage in child- and adult-directed activities, and provide easy access to spaces and materials regardless of children’s body sizes or means for moving around (e.g., wheelchair, crawling).
   - Use a variety of communication techniques to help children know how to use the environment, for example to put away toys and materials, by including children’s home language, English, signs, pictures, labels, signals, and other means.
   - Design activities that accommodate a wide range of individual interests, experiences, understanding, and abilities.

3. The early educator chooses activities and materials that are moderately difficult and offer multiple possibilities for each child’s interactions.

   - Arrange the storage and display of materials to allow for access and reach by all children, including children with different motor abilities, and which support children to take on clean-up responsibilities.
   - Plan activities and materials that support different means of exploration and manipulation, accommodating different skill levels and abilities.
   - Communicate with families to identify culturally appropriate activities and materials they can carry out at home.

4. The early educator directly teaches children to use more positive approaches to learning by prompting and modeling their use, encouraging and supporting their initial attempts, and reinforcing their efforts and successes.

   - Provide culturally and linguistically appropriate language models for children to use in figuring out and describing what happened and what happens next.
   - Clearly communicate the desired expectations of the child- and teacher-directed activities, using multiple ways for presenting the directions and tasks (e.g., simple sentences, pictures, and models).
   - Use different levels of prompting, modeling, and guidance to initiate a specific positive approach to learning. Through minimal cueing or prompting in the beginning, then gradually increased levels of assistance as needed, the child can be encouraged to act.
   - Support multiple means of expression (e.g., words, actions, symbols) among children.

## Universal Design Designations for the Early Educator

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## Summary & Implications

Positive approaches to learning are important for children to successfully enter school. Early educators can teach and nurture these approaches to learning by creating opportunities, designing appropriate activities and materials, and providing children with the guidance, support, and encouragement they need. These same positive approaches to learning are important for all children to learn, including children who may struggle to implement them because they have had little experience (e.g., poverty, family culture) or because of the presence of physical and cognitive disabilities.

Early educators can design their activities and lessons to ensure all children acquire these positive approaches to learning.

Effectively designing early education environments to nurture curiosity, independent exploration, problem solving, persistence, etc. is challenging in programs that include children with diverse family backgrounds and/or skill levels. The need to ensure that all early education programs can embrace this diversity and design effective physical, social, and instructional environments is critical, however. The principles, ideas, and strategies in this brief represent a starting point for giving early educators the tools to make this happen.

The bibliography for this briefing paper series is online at: [http://www.iidc.indiana.edu/ecc/products_research.htm](http://www.iidc.indiana.edu/ecc/products_research.htm)
Many people think that a child who is ready for school is one who knows numbers, letters, and colors. These are indeed important for a child to know and are a part of cognitive skills and general knowledge. However, looking at the readiness equation above, one can see that cognition and general knowledge are only one part of the school readiness equation.

This working paper examines cognition and general knowledge associated with ready children. It is part of a series identifying early education practices associated with successful school readiness for all children. Topics in this series focus on ready children (health and physical well-being, language and literacy, cognition and general knowledge, social-emotional skills), ready families, and ready schools.

Two children in Ms. Mary’s Head Start class have been building with blocks. Ms. Mary calls out, “It’s time for clean-up.” Anna and Jimmy continue to build. Ms. Mary helps them begin by saying, “Can you put four blocks away?” Jimmy isn’t sure how many four is and picks up as many as he can hold in his arms. The teacher says, “Wow, you’ve got a lot of blocks. Let’s count them together” and helps Jimmy count his six blocks as he slides them onto their places on the shelf. Anna puts her four away and gets another four, saying, “That’s eight so far!” Later at circle time, Ms. Mary guides the children in remembering what they saw on a walk. She asks, “What did we see when we looked up high? Do you remember?” A child says, “The sky had clouds.” Ms. Mary adds it to the remembering list.

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What We Know: Important Child Outcomes Associated with Cognition and General Knowledge

Cognition is how we know, learn, and remember. It involves the thinking skills that children use to make sense of all the general knowledge that they acquire. Cognitive skills enable children to make meanings, patterns, and relationships in their learning, for example, the ability to understand how to count objects in order to pick up four blocks. Among the most basic cognitive skills are perception, attention, imitation, and memory. Children’s ability to retain memories increases over time, and they learn strategies to help with remembering, for example, practicing what they want to remember.

The ability to combine cognitive skills helps children to expand their learning. Children begin to make observations, understand cause and effect, learn intentionally, and use symbolic and representational thinking for reading, writing, mathematics, and other skills. At the same time, children begin developing the ability to see relationships among objects by putting them in order and sorting them by type. As they develop and learn, children also learn to solve problems, think logically, and form explanations.
Cognition and General Knowledge: Important Learning Outcomes

1. The child uses intentional strategies to remember, learn, and do, including practice, private speech, planning, and reflecting. (Traditional checklist items: follows a two-step direction; sings a song or retells a story.)

2. The child explores, observes, and compares things about himself and his world using color, size, shape, number, and other characteristics. (Traditional checklist items: sorts items by color, size, and shape; orders three objects by size; identifies bigger/smaller.)

3. The child uses representation, as well as invented and common number and letter symbols, to communicate observations, ideas, experiences, and experiments. (Traditional checklist items: recognizes name in print; recognizes some letters and single digit numbers; draws a person with head, eyes, mouth, body, arms, legs.)

4. The child makes predictions, conducts investigations, solves problems, and provides explanations by combining his knowledge and various cognitive skills. (Traditional checklist items: completes a ten piece puzzle.)

5. The child acquires and uses knowledge about the world including names and attributes of things, categories, and relationships. This includes the traditional learning areas of mathematics, science, language and literacy, social studies, music, and art.

Educational research clearly indicates that there are things early educators can do to increase the amount of cognitive skills and general knowledge children attain. The focus of the research has been to determine the effectiveness of early mathematics and science curricula and instructional strategies.

One important research finding is that there is a developmental sequence to how children acquire certain mathematics skills and concepts. Many early educators have thought that providing the right environment and exposure to the right activities would be enough to promote learning. However, educators also need to plan the order of the ideas they introduce to children, so that they present activities that build from one idea and skill to the next. A good way to do this is to choose a curriculum that research has shown to be effective. When educators are continuously aware of how children are developing and learning, they can offer new activities at the best time for each child.

Another research finding pertains to the critical role of the early educator’s communication with the child and how that communication takes place. Language is important to the learning process, and since children are just acquiring language, early educators must provide the vocabulary and descriptions of children’s mathematics and science activities and other projects for them. Conversations and questions are techniques that early educators use, but research shows that educators should also explicitly describe to the children what they observe them doing, use the “think out loud” technique to help children understand the problem-solving process, and ask questions that help a child move to the next level of understanding. In addition, early educators can support and reinforce children’s learning by writing what children say about their activities, using photos and work samples to help children remember what they have done, and recording key points that have been learned in their math and science activities.

Research on early math and science learning has also found that children acquire more mathematics and science knowledge and skills when provided with a balance of open exploration and focused investigation. Offering the open exploration of well-equipped learning centers during free choice and small group times gives children a chance to become comfortable and learn with the equipment and materials. Focused investigations ask children to use the equipment and materials in new or specific ways, find new solutions, and solve problems in order to stretch their learning. Research has also identified the value of an organized learning environment that includes equipment, materials, games, books, and computer programs that specifically promote exploration and investigation of math, science, and other learning areas.

In summary, the early educator promotes children’s cognitive skills and general knowledge when she:

1. Plans math, science, and other learning goals for the children using (a) a coherent, integrated, standards-based curriculum and (b) knowledge of each child’s developmental characteristics, knowledge, skills, learning styles, and preferences.
2. Provides children with a well-organized environment with equipment, materials, games, books, and computer programs that specifically promote exploration and investigation of math, science, and the other learning areas.

3. Promotes learning in math, science, and other areas by providing a balance of open exploration and focused investigation activities.

Making These Practices Work for ALL Children: The Universal Design of Early Education

An early educator might find it easy to say, “I’ll use ‘thinking out loud,’ prompting, conversation, games, and other strategies to enable each child to acquire thinking skills.” As usual, saying and doing it for each child are two different things. The children who come to our settings bring a wide range of individual characteristics that influence their ability to learn. The data from the Early Childhood Longitudinal Study and other research have shown that there are differences in school readiness associated with the child’s health and well-being, the kinds of early learning experiences the child has previously had, the child’s home language, the child’s abilities and disabilities, and more. Each of these could prevent a child from being able to be ready for school. Furthermore, children who do not have school readiness tend not to catch-up.

A critical question that every early educator must answer is, “What practices should I use to make sure each child is able to access the learning needed for school readiness?” The principles of universal design for school readiness, presented in Figure 2, are an effective approach to ensuring that each child is able to access learning. The basis of the universal design concept is that an object, environment, or other thing has been designed in a way that ensures that everyone can use or access it from the start. An early educator can use the principles to guide her thinking as she adds or fine tunes the evidence-based instructional strategies to respond to children’s learning characteristics.

Table 1 presents the strategies and offers suggestions for implementing them based on universal design.

Summary & Implications

Recent research has contributed to our knowledge of young children’s cognition and general knowledge. Examples of cognitive skills include attention, representational and symbolic thinking, and problem solving. General knowledge includes the details of the world in which we live. Research has also identified practices that are effective for promoting children’s development and learning in this area. Strategies for promoting children’s readiness include planning the sequential introduction of concepts and skills, providing a learning environment that is thoughtfully organized to give children the equipment and materials that encourage learning in math, science, and other areas, and using strategic conversations and questions to prompt children’s learning.

Furthermore, application of the principles of the universal design of early education to these strategies can ensure that each child will be able to access the learning needed for school readiness. The first step is adopting the personal goal of ensuring that each child will access the needed learning, just as Ms. Mary in Head Start is doing for Jimmy. The next is to begin refining and adding the instructional practices that support each child’s learning. The third is the step of increasing professional learning to take advantage of new results coming from research and practice in the area of cognitive skills and general knowledge, as well as in the other aspects of school readiness. Following these steps, each early educator can contribute to a child’s success in school.
## Evidence-Based Practices

1. The early educator plans math, science, and other learning goals for the children using (a) a standards-based curriculum and (b) knowledge of each child’s developmental characteristics, knowledge, skills, learning styles, and preferences.

2. The early educator provides children with a well-organized environment, with equipment, materials, games, books, and computer programs that specifically promote exploration and investigation of math, science, and other learning areas.

3. The early educator promotes learning in math, science, and other learning areas by providing a balance of open exploration and focused investigation.

4. The early educator uses thinking out loud, prompting, conversation, games, etc. to enable each child to acquire thinking skills (recall, logical thinking, prediction, planning and reflection, and problem solving).

## Universal Design Considerations for the Early Educator

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- Enable each child to demonstrate his learning by using multiple, but comparable, methods of assessment that take into consideration the child’s developmental and experiential characteristics.  
- Talk to each child’s family to understand the goals they have for their child and to learn about the family’s preferences and culture.  
- Offer activities that incorporate children’s interests, experiences, and local culture and that help children to reach goals by participating and learning in multiple ways. |
| 2. The early educator provides children with a well-organized environment, with equipment, materials, games, books, and computer programs that specifically promote exploration and investigation of math, science, and other learning areas. | - Create a physical environment that ensures each child’s easy and independent access to all activities, spaces, equipment, and materials by considering each child’s sensory, motor, linguistic, cognitive and experiential characteristics.  
- Provide equipment, materials, games/toys, books, and computer programs that use children’s home languages and English, and which reflect family experiences and local culture.  
- Offer multiple types of equipment, materials, games, books, and computer programs that provide each child with equal access to the concepts and skills in math, science, and other learning areas. |
| 3. The early educator promotes learning in math, science, and other learning areas by providing a balance of open exploration and focused investigation. | - Provide guidance and support that enables each child to explore learning centers and the larger environment by motivating some children, helping others to play, or assisting others to try new activities based on individual learning styles and skills.  
- Present children with focused investigations in math, science, and other learning areas by communicating in languages children understand, using pictures, symbols, graphics, and other means. Communicates with families to identify culturally appropriate activities and materials they can carry out at home.  
- Help each child learn to investigate by modeling, prompting, and elaborating on what each is doing and by providing multiple guided practice opportunities.  
- Arrange the environment and the schedule in ways that let children continue projects later in the day or on other days, in response to children’s individual energy levels, attention spans, or interests. |
| 4. The early educator uses thinking out loud, prompting, conversation, games, etc. to enable each child to acquire thinking skills (recall, logical thinking, prediction, planning and reflection, and problem solving). | - Offer activities that facilitate each child’s thinking skills, such as individual and small group planning and playing word, card, and tile games to facilitate memory, while considering each child’s various cognitive skills.  
- Explicitly name and demonstrate thinking skills by “thinking aloud” using the child’s home language, English, or communication system. Uses different levels of prompting, modeling, and guidance to initiate a specific positive approach to learning. S/he may begin with minimal assistance and gradually increase his/her level of assistance to assist the child to act.  
- Adjust activities that promote thinking skills by shifting the pace of the activity, including adequate wait time for any child to respond, and by providing devices to support memory and communication.  
- Use individualized questioning and prompting techniques to nudge each child’s thinking to the next level. |

The bibliography for this briefing paper series is online at: http://www.iidc.indiana.edu/ecc/products_research.htm
A child’s physical well-being is the cornerstone for all components of school readiness. Researchers agree that children’s physical well-being frames their learning opportunities, either expanding or limiting them. A child’s physical well-being can affect the ability to actively engage, physically and mentally, in the intended and unintended learning opportunities during the most formative years. Disruption in continuous or full engagement with learning, resulting from injury or from chronic or communicable disease, can have a negative impact on the attainment of the breadth and complexity of skills necessary for school readiness.

Researchers and health professionals define physical well-being as the ability to be fully engaged, on a regular basis, in all developmentally appropriate activities. Activities of preschool-age children that are critical to school readiness require energy, stamina, visual and auditory acuity, and large and fine motor skills. The promotion and maintenance of a child’s physical well-being in early care and education require a focus on prevention through safe and healthy environments and safe and healthy practices by staff and children.

Equally important is comprehensive health care for children, and support for effective communication between early education and care providers and parents to ensure access to, and utilization of, services and supports for the child’s physical well-being. Without an investment of resources equal to that in other school readiness areas, a child’s ability to take full advantage of an early childhood education program may be compromised.
What We Know: Important Physical Health Attributes Associated with School Readiness

Health and early care and education experts have identified several physical health attributes that are crucial to ensuring that young children are ready and able to succeed when they enter school (Figure 1). Research has found that the presence of these attributes is significantly influenced by the socio-economic status of the family. Children from lower socio-economic families are less likely to receive routine health care, including immunizations, developmental and other screening, and dental care. Lack of screening and assessment for physical and developmental needs decreases children’s enrollment in programs that provide supportive services to meet identified needs, often resulting in developmental delays. Research has shown that pre- and post-natal exposure to environmental toxins (e.g., lead, mercury) has a lifelong negative impact on children’s cognitive development.

Figure 1
Physical Health Attributes Associated with School Readiness

1. Children have up-to-date recommended immunizations.
2. Physical and developmental disabilities, mental health, and chronic health conditions are identified and treated.
3. Children are free of communicable disease and accidental, unintentional, or intentional injuries.
4. Children have sufficient energy and stamina to engage in age-appropriate activities.
5. Children’s teeth are free of decay and pain, and children have good oral hygiene and healthy teeth.
6. Children have age-appropriate large and small muscle development.

What We Know: Effective Early Education Practices

How can early childhood educators promote these health indicators, to help successfully prepare young children for school?

- Implement policies and practices that promote physical well-being.

Children depend on adults to make healthy choices for them and to teach them to make healthy choices for themselves. While some degree of risk taking is desirable for learning, a quality early care and education program prevents hazardous situations and practices that are likely to result in adverse health and safety consequences for children.

Development of policies and recommended practices based on research, combined with input from local subject experts, parents, and staff can result in greater adherence to policies. Enrollment, nutrition, sanitation, transportation, exclusion of ill children, sleep, and emergency preparedness are examples of policy and procedures necessary to promote physical well-being of children and staff.

Children mimic the actions of adults, creating the need for sound health and safety practices on the part of early care and education professionals. Research cites nutrition, physical activity, and hand washing as staff practices that have the greatest impact on children’s health habit development.

- Provide safe and healthy environments.

Programs must develop and maintain a safe and healthy environment that provides appropriate and well-maintained indoor and outdoor physical environments to minimize exposure to illness and injury. Environments are never neutral in their impact on children. Too little or poorly designed free space creates risks for injury and disease for children and staff. Interaction between the space and the furnishings helps direct people to desired activities. For example, placement of the eating area and the toileting area adjacent to sinks promotes the practice of hand washing. Careful attention to large motor equipment and spaces is critical due to the exploratory nature of young children. Also, the creation of different areas for large and small muscle play encourages appropriate use of materials and decreases the likelihood of injury resulting from an incompletely developed sense of body image and coordination.

Sufficient ventilation and air circulation, removal of toxic materials such as lead and mercury, moderate room temperature and humidity, a combination of natural and artificial light, and easy to clean wall and floor surfaces are all important environmental elements in early care and education settings that affect a child’s physical health.

- Provide and maintain age-appropriate equipment, furnishings, and materials.

Properly maintained and cleaned equipment, furnishings, and materials will result in fewer outbreaks of communicable disease and injuries. Additionally, the arrangement of furnishings to facilitate a child’s ability to focus and interpret the experiences provided by the program is critical to the development of all good health habits, as well as other related school readiness skills. Provision of too little or too much equipment and materials will result in less than optimal safety for the children. Children’s non-engagement due to a lack of materials, or overstimulation due to a cluttered environment, increases their risk of injury.

Adhering to a regular schedule of equipment and toy inspection and cleaning is important to reduce the potential for injury from unsafe materials and illness spread by contaminated objects.

- Ensure that staff is knowledgeable about health services in the community.

The attainment and maintenance of optimal physical health, to facilitate a child’s consistent attendance at and engagement in all components of early care and education, require the utilization of health services for immunizations, well-child checks, treatment of illness, and identification of special health issues. Early care and education providers’
knowledge about available community health services, eligibility, and processes for enrollment in those services is crucial to the health status of individual children and, consequently, to the overall level of health in the facility. Equally important is familiarity with eligibility for and enrollment in Medicaid and Hoosier Healthwise, programs that provide healthcare cost coverage for children.

- Ensure that staff communication with families and health care providers is consistent, timely, and meaningful.

Implementation of and support for consistent, timely, and meaningful communication between the program, the child’s family, and the child’s community-based health professionals and agencies, to address any health, mental health, or safety matter that affects a child, are critical components of school readiness. It is estimated that over 12 percent of children under five live in poverty, increasing the likelihood that access to preventive and therapeutic health services is extremely limited or nonexistent.

The strategies summarized above answer the question, “How can early childhood educators promote these positive approaches to learning that successfully prepare young children for school?” The next question to answer is, “What do early educators need to do to insure these strategies will work for all learners, regardless of differences in abilities, cultural and linguistic backgrounds, and economic status?” The focus of this section is on the universal design of early education—designing our physical, social, and instructional environments to ensure that every child is able to participate, learn, and benefit (see Figure 2).

The principles of universal design are applicable to the field of early care and education because increasingly diverse groups of children are entering into early childhood programs. We know that a one-size-fits-all approach simply will not work. We know that some children may struggle in learning specific skills for reasons related to their abilities, cultural and linguistic background, or economic status. All children can learn and all bring specific gifts to the classroom, but some children may also face challenges related to their diverse backgrounds and ability levels. Figure 2 offers suggestions for universally designing the recommended practices presented earlier.

Making These Practices Work for ALL Children: The Universal Design of Early Education

The design of the physical environment enables all children to have access and equitable opportunities for full participation in all program activities. This includes structures, permanent and movable equipment and furnishings, storage, and materials.

2. The design of health and safety program components minimizes risks and hazards for all children. It ensures all children, regardless of health status or condition, have ongoing access to early care and education by minimizing interruptions to their learning due to illness and injury.

3. The design of the social-emotional environment offers all children equitable access and full membership to the social-emotional life of the group, and supports their social-emotional development.

4. The design of the instructional environment enables all children equitable access to learning opportunities and multiple means for engagement and learning. This includes the curriculum, instructional practices, materials, and activities.

5. The design of individual assessment and program evaluation practices provides multiple approaches to finding out what children know and can do in order to equitably assess individual learning, development, and educational progress.

6. The design of family involvement practices supports the equitable access and engagement of all families in the full range of experiences. This includes ongoing communication, learning opportunities, and program involvement activities.

Summary & Implications

Physical and mental health and well-being are important for children to be successful in school and later in life. Early care and education professionals profoundly affect children’s physical and mental health status through a program’s environment, equipment and materials, practices, collaboration with health service providers, and partnership with parents to address health issues. These same early education concerns are even more critical for children who have had limited interactions with the health care system because of poverty, family culture, or inadequate health services. The application of the principles of universal design to meeting children’s early health needs can help to ensure that each child will enjoy the health and well-being necessary for school readiness and success. The principles, ideas, and strategies in this brief represent a starting point for giving early educators the tools to make this happen.
Evidence-Based Practices | Universal Design Considerations for the Early Educator
---|---
1. Health and safety policies and practices exist that address the promotion of good health habits (e.g., disease transmission prevention, nutrition, physical activity), responses to emergency situations (fire, natural disasters, serious injury, and illness), and sanitation. | ■ Ensure that emergency evacuation policies include provisions for children or staff with physical limitations.
■ Establish practices that ensure children with dietary restrictions due to food allergies and/or religious preferences receive proper nutrition.
■ Ensure that children with chronic health conditions requiring medication or medical procedures are included in care.
■ Implement policies and practices that minimize risk of exposure of children and staff to communicable diseases, but that enable enrollment of children with life-threatening health conditions.

2. The outdoor and indoor environments are safe, clean, attractive, and comfortable for all children and ensure their personal health and safety. | ■ Ensure that protective surfacing in fall zones allows maximum mobility for children with motor impairments.
■ Make passageways between furniture and equipment wide enough to accommodate all children.
■ Ensure that environments are free of clutter to allow equal access to all areas by staff and children.
■ Place bathroom fixtures to allow easy access to toilets and hand-washing sinks by all children.

3. All equipment, furnishings, and learning materials, including toys, are in good repair, easily cleaned, and developmentally appropriate for the children enrolled. | ■ Arrange furnishings to ensure access to learning materials by all children. Make sure shelf height and fasteners do not limit access.
■ Choose and arrange furnishings, such as tables and chairs, to promote and facilitate small and large group activities for children of all physical statures.
■ Choose learning materials, including books and clothes for role playing, that reflect multiple cultures in socially acceptable ways.

4. Early care and education staff are knowledgeable about the availability of health services in the community, eligibility requirements for the services, and the process for enrollment. | ■ Have a directory of services available on site that includes those that support children’s physical, mental, and social-emotional health.
■ Make accommodations for interpretation to avoid language barriers to access.
■ Provide sufficient staffing to allow review of copies of applications for enrollment in health services.

5. Consistent, timely, and meaningful communication between the program, the child’s family, and the child’s community-based health professionals is implemented and supported in order to effectively address health, mental health, or safety matters. | ■ Use a variety of communication strategies to accommodate all families’ literacy levels, languages, and physical challenges.
■ Convey communication, both written and oral, in a culturally sensitive manner.
■ Schedule staff to allow time for the meaningful and timely exchange of information in the preferred language of the parent.
■ Ensure that the timing and volume of communication reflect an understanding of families’ life circumstances.

6. Child and family health histories are obtained upon enrollment and updated yearly, at a minimum. All information provided is kept confidential by staff. | ■ Use health history forms that include information from the family and any health professionals involved with the child.
■ Ensure that questions included on the form are easily understandable by parents and presented in a culturally sensitive way.
■ Post notices of dietary restrictions, alternative positioning of infants as requested by a physician, and necessary medication records in key locations, with adequate covering to ensure confidentiality.

Table 1
Universal Design Applications

The bibliography for this briefing paper series is online at: [http://www.iidc.indiana.edu/ecc/products_research.htm](http://www.iidc.indiana.edu/ecc/products_research.htm)
Our ability to interact with others is one of the key skills developed throughout the early years. An individual’s ability to understand and use language determines largely how successful he or she will be not only in school, but also in life. Over the past decade, the conversation on the growth of language has evolved to an understanding that early literacy skills can be seen as one facet of language. Many of the conditions that support the growth of language skills that allow a child to interact on a meaningful level with others are also those needed to support growth in literacy skills. In addition, without doubt, the conditions required for the growth of literacy skills support language development.

This brief examines four aspects of communication development—spoken and heard oral language, and written and read print language—and how universally designed early childhood education supports the child’s development of these critical communication skills in anticipation of entry into school.

Four-year-old Kim is being picked up from her child care. She is excited because she has drawn a picture for her mom. “Look at my picture, Mommy.”

“I see. It’s beautiful. Tell me about it.”

“It’s a picture about the ‘Wheels on the Bus’ song. See? It’s raining. The wipers are going swish swish swish, and Ms. Linda helped me write ‘swish’ right here. Here’s my name, and ‘I love you Mommy’ right here,” Kim says, pointing to her writing on the page.

“It’s beautiful,” says Kim’s mom, giving her a big hug. “We can put it on the refrigerator with the other pictures when we get home.”

Reading, writing, listening and speaking are streams that flow into the same pool: they are constantly refreshing each other.”

(Braunger & Lewis, 1997)
By the time children enter kindergarten, they should be demonstrating several important language and literacy skills. Figure 1 identifies six key skills children should have.

This is not where we start, however. Even babies are observing the world around them. The early interactions between caregiver and child lay the foundation for later social communication interactions and language growth. Everything a child does during the day, whether at home or in child care, has the potential for communication interactions. From the first cooing hugs between an infant and caregiver, we are shaping knowledge not only of how the social dance of communication happens, but also of how sounds work, how words are formed, how sentences are put together, and how we get information from all of these symbols. Babies are beginning to make connections between sounds and events, words and people, and this early awareness of the sounds in the environment is, in a way, the beginning of learning to read.

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**Figure 1**

Language and Literacy: Important Learning Outcomes

By the time children enter kindergarten, they should be:

1. Using language to get information, give information, and explore ideas.
2. Telling and retelling familiar stories (both favorite fictional stories and narratives about their own lives).
3. Understanding that pictures and print represent objects or ideas.
4. Matching spoken words with familiar written ones, such as their name or signs in their environment.
5. Identifying some letters and making some letter-sound matches for familiar words.
6. Engaging in writing attempts that demonstrate understanding of the use of writing to share information, and that approximate known letters in written language.

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**What We Know: Effective Early Education Practices**

- **Engage children in conversations that encourage them to use language to get information, give information, and explore ideas.**

  Research tells us that children who grow up in environments where the adults engage in meaningful conversations with them develop knowledge of how language works. Extensive research on mother-child interactions, and nonparental child care providers, has demonstrated how well linguistic responsiveness supports children’s language development.

- **Children whose communication interactions are encouraged and expanded by adults have advantages in school over children who have more limited access to meaningful conversation. Since language proficiency is a strong predictor of reading success, it is important to recognize that our language-based interactions play a critical role in our children’s development of both sets of skills.**

- **Children who hear more words develop knowledge about their world, and have a larger vocabulary by age 3. Research tells us that vocabulary size is another indicator of later reading success.**

- **Children who play with sounds (nursery rhymes, finger plays, songs) have an increased understanding of the sounds and letters that make words. Another important factor research has identified in successful reading is phonemic awareness, or the ability to hear and manipulate separate sounds in words. The early sound play, rhymes, finger plays, and songs all prepare a child’s brain for the eventual task of learning that those sounds translate to the letters on the page. Research further shows that instruction in phonemic awareness helps all types of children improve their reading.**

- **Plan activities to help children develop storytelling skills.**

  Story-telling is an activity that meets many language and literacy needs. Through telling stories about daily activities, we provide vocabulary and language experiences, and we introduce the child to constructing narratives that have a beginning, a middle, and an end. Conversations about what you are currently doing together, at home or in child care, set the stage, followed by conversations about what you have done in the past, and will be doing in the future. Story-telling can be as simple as talking about daily events, but clearly has parallel opportunities using books. By reading and re-reading favorite books, children are learning about how words work, how language works, and how print works.

- **Design environments in which books and other print and writing materials are available to children throughout the day.**

  Research has found that print awareness is another critical factor influencing literacy development. Children who have had early experience with books enter school having knowledge and skills that are important for learning to read:

  - They know how books work;
  - They know that the words on the page have meaning;
They know that words are made up of sounds which fit together to make meaningful units; and
They have experience with the types of behaviors expected when reading.

Integrate writing instruction into routines and play, and across learning areas.

Another way children can see and use print in functional ways is through writing. Researchers have shown that children who have repeated exposure to writing as an activity have an increased understanding of the way print works. Research further shows that teaching reading and writing together improves children’s skills in both areas. Writing encourages children to break down the components of the words, furthering their phonemic awareness, understanding of the letters, and word recognition. Reading improves children’s writing, and teaching both together improves both areas.

Provide families with opportunities, information, and materials that help them facilitate their child’s language, literacy, and writing skills at home.

One of the most important things adults can do to enhance a child’s language and literacy skills is to talk with children, and this includes reading with them. One of the most important things early educators can do is to promote a continuity of experiences between home and the early care and education setting.

As educators, how do we ensure that all children and families, whatever their economic, academic, social, or cultural differences, ability level, or health status, have access to information and activities that can support school-readiness?

Figure 2 discusses the universal design of programs to ensure that each and every child can access and engage in the learning opportunities available, and can benefit from that learning environment.

We can begin to consider these principles in relation to a child’s language and literacy needs in a number of ways. Table 1 presents several ideas for universally designing the practices described earlier.

Figure 2
Application of Universal Design Principles to Early Education

1. The design of the physical environment enables all children to have access and equitable opportunities for full participation in all program activities. This includes structures, permanent and movable equipment and furnishings, storage, and materials.
2. The design of health and safety program components minimizes risks and hazards for all children. It ensures all children, regardless of health status or condition, have ongoing access to early care and education by minimizing interruptions to their learning due to illness and injury.
3. The design of the social-emotional environment offers all children equitable access and full membership to the social-emotional life of the group, and supports their social-emotional development.
4. The design of the instructional environment enables all children equitable access to learning opportunities and multiple means for engagement and learning. This includes the curriculum, instructional practices, materials, and activities.
5. The design of individual assessment and program evaluation practices provides multiple approaches to finding out what children know and can do in order to equitably assess individual learning, development, and educational progress.
6. The design of family involvement practices supports the equitable access and engagement of all families in the full range of experiences. This includes ongoing communication, learning opportunities, and program involvement activities.

Summary & Implications

From the moment a baby is born, the chain of events that creates a child who is ready to enter kindergarten begins. The many relationships in which the child engages are the first and most critical support in learning the language which will enable the child to explore ideas and interact with the world. Early educators and families provide experiences with sound play, words, print, and activities that expand the child’s understanding of the world around him or her, and the meaningful symbol system that is our spoken and print means of communicating.

Through exploration and experience with sounds and words, through conversations that provide a significant source of new ideas and vocabulary, and through exposure to the variety of print media that informs our lives, our children can enter kindergarten with the language and literacy tools necessary for success. By ensuring that our practices are universally designed, we can ensure that all children and families can not only access and engage in the experiences, but also benefit from them.
<table>
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<tr>
<th>Evidence-Based Practices</th>
<th>Universal Design Considerations for the Early Educator</th>
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| 1. Engage children in conversations that encourage them to use language to get information, give information, and explore ideas. | - Demonstrate social and communication interactions that respect all children’s abilities, health status, cultural and linguistic backgrounds, and social and educational experiences.  
- Immerse children in multiple ways of representing and interpreting information around them.  
- Utilize different modes (speech, pictures, gestures, sign language) for presenting information.  
- Provide information and ask questions at varied levels of language comprehension.  
- Positively reinforce all communication attempts, then expand or restate attempts to use new vocabulary or language.  
- Ask open-ended questions, allowing exploration of ideas at varied levels as well as multiple means of responding. |
| 2. Plan activities to help children develop story-telling skills which give them experience with narrative styles, with vocabulary and language, with phonological awareness, and with story structures. | - Embed story-telling opportunities into multiple routines or activities throughout the day.  
- Adjust language, pace, content, and repetition.  
- Integrate the use of varied formats in the construction and sharing of stories.  
- Repeat the story multiple times over time.  
- Use pictures, props, etc. to prompt children’s recall based on individual learning styles.  
- Record children’s stories via written language, audio, or video. |
| 3. Design environments in which books and other print and writing materials are available to children throughout the day for children to use for pleasure and as resources. | - Provide books and other print materials that represent varied ability levels and health status, and reflect economic, academic, social, cultural, and linguistic diversity.  
- Design contexts in which the many uses of print materials are embedded, encouraging their use for a wide variety or purposes.  
- Illustrate written instructions or labels with photos or pictures.  
- Present multiple examples of differences in ability levels, health status, economic, academic, social, cultural, and linguistic backgrounds over time.  
- Schedule time for direct instruction in reading skills. |
| 4. Integrate writing instruction into routines, into play, and across learning areas. | - Plan writing experiences that engage children on multiple levels of difficulty.  
- Include time for both exploration and explicitly taught skills in writing letters.  
- Take into account varied physical needs (e.g., materials are available for writing that are thick and thin, large and small, have grips to assist with proper grasp, etc.). |
| 5. Provide families with opportunities, information, and materials that help them facilitate their child’s language, literacy and writing skills at home. | - Strive to provide opportunities, information, and materials that are responsive to the wide range of families’ ability levels and health status, and reflect economic, academic, social, cultural, and linguistic diversity. |

The bibliography for this briefing paper series is online at: [http://www.iidc.indiana.edu/ecc/products_research.htm](http://www.iidc.indiana.edu/ecc/products_research.htm)
Increasing numbers of children enter school without the skills or abilities necessary to succeed, and ongoing research confirms the need to think about children’s readiness for school as multi-faceted. There is growing consensus among researchers and educators that we must consider social and emotional maturity as part of school readiness, rather than simply focusing on a limited set of academic skills. This brief focuses on the skills young children need in the area of social-emotional development, and how best practices that support these skills can be implemented in order to help all children and their families benefit, regardless of differences in their abilities or cultural, linguistic, or economic backgrounds.

Ready Child + Ready Family + Ready School = Successful School Readiness

This working paper focuses on the social-emotional development of ready children. It is part of a series identifying early education practices associated with successful school readiness for all children. Topics in this series focus on ready children (health and physical well-being, language and literacy, cognition and general knowledge, social-emotional skills), ready families, and ready schools.

Omeed and his mother arrive at preschool hand-in-hand. The teacher greets them by name, and both Omeed and his mother look down and smile shyly. Omeed greets some of his peers enthusiastically, but then he hovers near them as an onlooker, not sure of how to join in their play. His teacher approaches him and asks if he would like to make something with the blocks. She gives him the words he needs to enter their play, and then she asks his mother how to say this in her native language. The children in the block corner have fun trying out these new and unusual words. However, Omeed’s playmates have difficulty understanding his request to play, and his first response is to lash out at them in frustration. Luckily, the teacher is ready to intervene, and she helps Omeed to enter the group by modeling simple words and gestures for him to use. He is welcomed into the block corner. Mom leaves with a smile on her face knowing that her son is in good hands in this classroom.

Increasing numbers of children enter school without the skills or abilities necessary to succeed, and ongoing research confirms the need to think about children’s readiness for school as multi-faceted. There is growing consensus among researchers and educators that we must consider social and emotional maturity as part of school readiness, rather than simply focusing on a limited set of academic skills. This brief focuses on the skills young children need in the area of social-emotional development, and how best practices that support these skills can be implemented in order to help all children and their families benefit, regardless of differences in their abilities or cultural, linguistic, or economic backgrounds.

What We Know: Important Skills

Numerous studies have found that a lack of social skills and emotional maturity contribute to the deficit in school readiness. In order to avoid difficulties at school entry, identifying and addressing these skills in young children is important while there is still time for improvement.

Key social-emotional skills include the following:

- The child is able to understand and talk about his/her own feelings.
- The child understands the perspective of others and realizes that their feelings may be different from his/her own feelings.
- The child is able to establish relationships with adults and maintains an ongoing friendship with at least one other child.
- The child is able to enter a group successfully.
- The child is able to engage in and stay with an activity for a reasonable amount of time with minimal adult support.
- The child is cooperative with companions most of the time and understands the need for rules and fair play.

- The child is able to manage feelings of anger, frustration, and distress when faced with emotionally charged situations (e.g., another child tries to take a favorite toy away).

**What We Know: Effective Practices**

What are the evidence-based practices that research shows are effective in enhancing or supporting the social-emotional skills young children need for school readiness? Numerous studies view strategies to support social-emotional development as a pyramid of practices. Inherent to such models is the idea that basic strategies must be in place before more intensive strategies. Each model describes the levels of the pyramid as a hierarchy that begins with building positive relationships with children, families, and colleagues, and it continues with classroom preventive practices, social and emotional teaching strategies, and intensive individualized interventions. The strategies that make up the base of the pyramid must be in place in order to support the higher, more intensive levels.

Research also supports the idea that, on all but the top level of the pyramid, using either incidental or explicit teaching strategies supports social skills. Incidental strategies are those that are embedded within the routines of the day, and educators use them during unstructured activities for brief periods. This type of intervention is effective in encouraging both communication and social skill development, and it supports children who may require numerous opportunities to practice skills in order to ensure they develop competence. Early educators look for opportunities that may occur during a variety of activities, and then use this knowledge to embed an occasion for either an individual child or a group of children to practice social skills. In contrast, explicit strategies are those that have been planned ahead of time, and they can target either one child or the whole group. For example, anger and impulse control includes being able to calm down instead of acting out. Specific interventions are utilized incorporate these skills into activities that children understand, can remember when needed, and enjoy doing. Early educators provide specific times throughout the day for children to practice this self-calming response so that it becomes a natural part of their repertoire of behaviors.

The literature demonstrates that the following strategies are effective in supporting social-emotional skills in young children:

- **Adopting a specific social skills curriculum:**
  The early educator adopts and implements a specific social skills curriculum on a classroom-wide basis. The reinforcement of social skills becomes an explicit part of the curriculum, and specific activities that support social skills become a part of the routine (e.g., a daily or weekly circle time where children explore emotions). The presence of a specific social skills curriculum also provides opportunities for the incidental support of social skills because the early educator is tuned into embedding the practice of these skills within the routines of the day. The frequency and duration of children's social interactions increase as a result of friendship activities, along with generalization of the skills to free-play periods.

- **Manipulating the schedule, routines, materials, and activities:**
  The early educator manipulates these variables in order to support social skills. Everyday activities and routines, such as coming and going or meal and snack times, provide ideal incidental occasions to embed opportunities to practice social skills. Friendship skills, like sharing and taking a turn, can also be explicitly introduced and reinforced through activities that are adapted to promote social interactions, by purposefully embedding pro-social responses in common early childhood songs, games, and activities. Materials such as the sand table or games that require give and take among children are available to support and promote social/friendship skills.

- **Peer modeling, peer tutoring, and peer proximity:**
  Through these strategies, socially competent peers, rather than the teacher, serve as the direct intervention agents to teach social behaviors. Teachers provide instruction to peers on ways to initiate and prolong social interactions with children needing help with their social skills, and they prompt or reinforce peers’ initiations. They naturally embed these strategies within the routine of the day, or plan the strategies as an intervention for a specific child. Increased rates of social interaction, increased use of language, and longer interactions between children have resulted from the use of such peer-mediated techniques. These strategies can be very effective because children tend to learn more from watching and imitating their peers than from adults.

- **Adult priming, modeling, prompting or reinforcing:**
  In these strategies, the early educator/adult serves as the direct intervention agent. The teacher may provide the initial structure for social interactions/activities and then pull back to allow the activity to develop naturally. For example, the teacher might help the children to set up a play situation such as playing store, assigning roles and helping the children get involved in the play, and then leave when the children become engaged and capable of continuing on their own. In other situations, the teacher models a behavior, prompts a child to imitate other children’s appropriate behavior, or reinforces appropriate, effective social behavior that is being displayed by the target child. The implementation of these strategies may be either incidental or planned ahead of time.

- **Social integration activities:**
  The early educator designs or arranges individualized peer interaction interventions that require advance planning and some level of expertise. The early educator arranges for a child with limited peer interaction skills to have planned opportunities on a daily basis to interact with children who are socially competent and responsive to the other child.
The strategies summarized above answer the question, “How can early childhood educators promote these positive approaches to learning that successfully prepare young children for school?” The next question to answer is, “What do early educators need to do to insures these strategies will work for all learners, regardless of differences in abilities, cultural and linguistic backgrounds, and economic status?” The focus of this section is on the universal design of early education—designing our physical, social, and instructional environments to ensure that every child is able to participate, learn, and benefit (see Figure 1).

The principles of universal design are applicable to the field of early care and education because increasingly diverse groups of children are entering into early childhood programs. We know that a one-size-fits-all approach simply will not work. We know that some children may struggle in learning specific skills for reasons related to their abilities, cultural and linguistic background, or economic status. All children can learn and all bring specific gifts to the classroom, but some children may also face challenges related to their diverse backgrounds.

Research highlights the social-emotional challenges that specific groups of children may face. Several major factors appear to build or maintain individual social-emotional resiliency, including three that speak to the importance of universal design: access to culturally appropriate support, continuance of rituals, celebrations, and practices, and interaction with positive role models from one’s own cultural tradition. Another factor that may influence pro-social behaviors is the language used in the child’s home. Parents and teachers have reported that children whose home language is one other than English are less likely to engage in three important pro-social behaviors: joining others in play, making friends, and comforting or helping other children. Children who exhibit these pro-social skills may have an easier time adjusting to school because the ability to make friends and to be sensitive to others contributes to a more positive learning environment. In addition, children with developmental delays may have feelings of being different from peers and adults other than their parents, which can affect their school experiences. Finally, additional research points out that children from low-income households have increased risks for being socially rejected or withdrawn from peers and teachers. This increases their risk of later school failure.

Therefore, as we look at the strategies we use to support socio-emotional development in young children, we must implement these strategies in ways that are meaningful to all individual children. In a universally designed early childhood setting, this goal should guide the design of the curriculum, practices, and environment so that children’s individual needs and strengths are acknowledged and addressed by the early childhood educator.

Table 1 offers suggestions for universally designing the recommended practices presented earlier.

Figure 1
Application of Universal Design Principles to Early Education

1. The design of the **physical environment** enables all children to have access and equitable opportunities for full participation in all program activities. This includes structures, permanent and movable equipment and furnishings, storage, and materials.

2. The design of **health and safety program components** minimizes risks and hazards for all children. It ensures all children, regardless of health status or condition, have ongoing access to early care and education by minimizing interruptions to their learning due to illness and injury.

3. The design of the **social-emotional environment** offers all children equitable access and full membership to the social-emotional life of the group, and supports their social-emotional development.

4. The design of the **instructional environment** enables all children equitable access to learning opportunities and multiple means for engagement and learning. This includes the curriculum, instructional practices, materials, and activities.

5. The design of **individual assessment and program evaluation practices** provides multiple approaches to finding out what children know and can do in order to equitably assess individual learning, development, and educational progress.

6. The design of **family involvement practices** supports the equitable access and engagement of all families in the full range of experiences. This includes ongoing communication, learning opportunities, and program involvement activities.

Summary & Implications

Our current educational system places emphasis on academic goals for children. As we move forward and make efforts to improve the outcomes that children are achieving, we must keep in mind that emotional development and behavioral self-regulation are as important to early development as learning to read. We must pay attention to the whole child. As we consider the social-emotional development of young children in relationship to their school readiness, we are reminded of the key role it plays and the need to provide support in ways that acknowledge differences in abilities as well as in cultural, linguistic, and economic backgrounds, in ways that reflect a philosophy of Universal Design. The principles, ideas, and strategies in this brief represent a starting point for giving early educators the tools to make this happen.
### Evidence-Based Practices

1. The early educator adopts a specific social skills curriculum that is implemented on a classroom-wide basis so that the support of social skills becomes an explicit part of the curriculum, and specific activities that support social skills become a part of the routine. For example, the curriculum includes a circle time activity devoted to identifying emotions.

   - Use a variety of materials and/or methods to portray the different emotions. Children may respond to pictures, act out an emotion, describe it, or draw their own picture portraying the emotion.
   - Allow for different ways of responding and demonstrating understanding of the emotions. Children may make a choice by pointing, vocalizing, responding with words, or picking up the picture that represents their answer.
   - Understand that a child’s response to or comfort with different emotions may vary. Reassure children in order to increase their comfort level in the classroom.
   - Ask parents and families to share their cultural experiences and expressions of different emotions, so that children understand that there are differences in how people express emotions. Discuss and reinforce the classroom norms, so that parents have a better understanding of the expectations for social-emotional behavior within the classroom.

2. The early educator manipulates the schedule, routines, materials, and activities in order to support social skills. Everyday activities and routines, such as coming and going or meal and snack times, provide ideal incidental opportunities to embed and practice social (friendship) skills like sharing and taking a turn. For example, a water table provides the activity for supporting children’s social interactions.

   - Arrange the physical aspect of the circle time activity to ensure that all children are able to engage and participate as independently as possible (e.g., toys/materials in the water, sand, or bean table allow for the fact that children have different abilities in physically manipulating materials).
   - Acknowledge that some children will not have had an opportunity to play in a water table. Add some familiar element to the activity in order to gain the child’s interest and comfort in participating in this activity.
   - Know that sensory-motor issues may prevent positive play for some children. Consider the best way to introduce children to this activity.

3. The early educator utilizes peer modeling in which he or she provides instruction to the child’s peers on ways to initiate and prolong social interactions with children needing help with their social skills, and prompts or reinforces peers’ initiations. For example, the early educator prompts one child to help another with his puzzle while modeling appropriate social skills.

   - Consider the verbal repertoire of both children by giving the helper (child) the words to use in offering help so that the offer is understood and/or acknowledged.
   - Provide the receiving child with a nonverbal way of responding, if needed.
   - Be available initially to interpret communicative attempts (e.g., vocalizations, body language, facial expressions, etc.) for this strategy to be successful.
   - Provide a puzzle that portrays an image that is familiar to both children to support their interest and extended engagement in this social opportunity.
   - Provide a choice of puzzles that reflects the physical and cognitive needs of the target child and supports his involvement.

4. The early educator includes social integration activities in his or her classroom by arranging for a child with limited peer interaction skills to have planned opportunities on a daily basis to interact with children who are socially competent and responsive to that child. For example, one child has the responsibility of greeting everyone entering the classroom in the morning.

   - Support each child’s individual way of communicating his or her greeting (e.g., verbally, through a communication device, with a written sign, by a gesture, etc.).
   - Accept that greetings may take many forms (e.g., eye contact, smiling, nodding the head, shaking hands, a small bow at the waist, a high five, etc.).
   - Provide for a variety of physical needs in this activity. Some children may physically tire before greeting everyone, and an alternative means of communicating a greeting may need to be substituted.
   - Be flexible and responsive to a broad range of emotional needs and abilities. Some children may not have the emotional regulation to stay with the activity long enough to greet the whole class, so a backup plan should be in place.

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**Table 1
Universal Design Applications**

<table>
<thead>
<tr>
<th>Evidence-Based Practices</th>
<th>Universal Design Considerations for the Early Educator</th>
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<tbody>
<tr>
<td>1. The early educator adopts a specific social skills curriculum that is implemented on a classroom-wide basis so that the support of social skills becomes an explicit part of the curriculum, and specific activities that support social skills become a part of the routine. For example, the curriculum includes a circle time activity devoted to identifying emotions.</td>
<td>Use a variety of materials and/or methods to portray the different emotions. Children may respond to pictures, act out an emotion, describe it, or draw their own picture portraying the emotion. Allow for different ways of responding and demonstrating understanding of the emotions. Children may make a choice by pointing, vocalizing, responding with words, or picking up the picture that represents their answer. Understand that a child’s response to or comfort with different emotions may vary. Reassure children in order to increase their comfort level in the classroom. Ask parents and families to share their cultural experiences and expressions of different emotions, so that children understand that there are differences in how people express emotions. Discuss and reinforce the classroom norms, so that parents have a better understanding of the expectations for social-emotional behavior within the classroom.</td>
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<td>2. The early educator manipulates the schedule, routines, materials, and activities in order to support social skills. Everyday activities and routines, such as coming and going or meal and snack times, provide ideal incidental opportunities to embed and practice social (friendship) skills like sharing and taking a turn. For example, a water table provides the activity for supporting children’s social interactions.</td>
<td>Arrange the physical aspect of the circle time activity to ensure that all children are able to engage and participate as independently as possible (e.g., toys/materials in the water, sand, or bean table allow for the fact that children have different abilities in physically manipulating materials). Acknowledge that some children will not have had an opportunity to play in a water table. Add some familiar element to the activity in order to gain the child’s interest and comfort in participating in this activity. Know that sensory-motor issues may prevent positive play for some children. Consider the best way to introduce children to this activity.</td>
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The bibliography for this briefing paper series is online at: [http://www.iidc.indiana.edu/ecc/products_research.htm](http://www.iidc.indiana.edu/ecc/products_research.htm)
Ready Child + Ready Family + Ready School = Successful School Readiness

This bibliography references the eight topics covered in All Children Ready for School, the briefing paper series identifying early education practices associated with successful school readiness for all children. Topics in this series focus on ready children (health and physical well-being, language and literacy, approaches to learning, cognition and general knowledge, social-emotional skills), ready families, and ready schools.

Contents

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Ready Families - Cathy Beard

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Social-Emotional Development - Lois Hutter-Pishgahi
### Approaches to Learning


Cognition and General Knowledge


Indiana Department of Education. (2004). Foundations for Young Children to the Indiana Academic Standards, revised. Retrieved February 24, 2006 from http://doe.state.in.us/primetime/


Communication, Language, and Literacy


Getting a Good Start with Infants and Toddlers


Health and Physical Well-Being


Ready Families


Social-Emotional Development


