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.
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.

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.

<table>
<thead>
<tr>
<th>Challenge children with moderately difficult tasks.</th>
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<tr>
<td>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 guidance and 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.</td>
</tr>
<tr>
<td>Directly teach and support children to use these approaches.</td>
</tr>
</tbody>
</table>

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.

Figure 2
Application of Universal Design Principles to Early Education

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Evidence-Based Practices | Universal Design Considerations for the Early Educator
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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.

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)