

INTRODUCTION

Background knowledge refers to the information that children learn and store in their memories—including information about themselves, other people, objects, and the world around them. The greater a child’s background knowledge, the easier it is to make sense of new concepts and information as children begin to talk and engage in literacy activities.¹

Children develop background knowledge and concepts through their daily interactions and experiences in their families and communities. They build “funds of knowledge” based on rules, concepts, values, and routines that are important in their community. Like their typically developing peers, children with disabilities who are [dual language learners](#) (DLLs) develop “funds of knowledge” in each of the languages spoken in their communities.² Children with disabilities who are DLLs may develop unique types of knowledge and understandings based on their individual experiences with various physical, cognitive, or linguistic challenges. Instruction and supports will need to be modified and individualized to help them develop and learn to their full potential.



WHAT THE RESEARCH SAYS

The research clearly tells us that children with disabilities who are DLLs learn just as well or better when they receive instruction in both their home language and English compared to peers who receive instruction only in English.³ Most importantly, developing and learning skills in the home language and in English helps children, including children with disabilities, actively participate in activities in the classroom, at home, and in their communities.

Two instructional approaches—project work where children engage in hands-on exploration activities and shared interactive storybook reading—are shown to be effective in helping young children with disabilities who are DLLs develop new knowledge and learn new words and concepts.⁴

- 1 Susan B. Neuman, Tanya Kaefer, and Ashley Pinkham, “Building Background Knowledge,” *The Reading Teacher* 68, no. 2 (October 2014): 145–48, <https://doi.org/10.1002/trtr.1314>.
- 2 Elizabeth D. Peña, “Supporting the Home Language of Bilingual Children With Disabilities: From Knowing to Doing,” *Journal of Communication Disorders* 63 (September–October 2016): 85–92, <https://doi.org/10.1016/j.jcomdis.2016.08.001>.
- 3 Gregory A. Cheatham, and Juliet E. Hart Barnett, “Overcoming Common Misunderstandings About Students With Disabilities Who Are English Language Learners,” *Intervention in School and Clinic* 53, no. 1 (September 2017): 58–63, <https://doi.org/10.1177/1053451216644819>; Donia Fahim, and Kelly Nedwick, “Around the World: Supporting Young Children With ASD who are Dual Language Learners,” *Young Exceptional Children* 17, no. 2 (June 2014): 3–20, <https://doi.org/10.1177/1096250613477870>.
- 4 Chün-Lán Debbie Guán, and Gregory A. Cheatham, “Bilingual Vocabulary Development for Dual Language Learners With Disabilities: Two Research-Based Approaches,” *Young Exceptional Children* 21, no. 3 (September 2018): 142–56, <https://doi.org/10.1177/1096250616649223>.

Project Work. Project work and science activities have been used successfully among young children with disabilities. Projects typically focus on an activity relevant to children's daily experiences making models of objects that children encounter in their lives, such as building a car out of cardboard boxes; growing plants from seeds; or experimenting with water and different containers. Projects are suited to meet the needs of children with disabilities who are DLLs in a variety of ways. They are collaborative and focus on children's strengths. Children can choose how to participate and use multiple modes to communicate and explore. By offering multi-modal, hands-on activities that allow children to explore, education staff (e.g., teachers, home visitors, family child care providers) and families are able to use a variety of effective teaching methods to support children's individual strengths and needs. These include:

- Building on children's interests and using real objects, making it easier for children to connect new learning to their everyday lives at home and in their communities.⁵
- Making adaptations to increase children's engagement and participation.⁶

Staff can use naturalistic teaching to embed instruction on children's individualized goals and objectives during daily activities and routines.⁷ Naturalistic teaching approaches build on a child's interest in an object or activity and have been successfully used by educators with infants, toddlers, and preschoolers in a variety of inclusive settings.⁸ For example, a toddler who is learning Spanish and English may have a goal of combining words or signs into phrases or sentences in Spanish (e.g., "Quiero galleta"), English (e.g., "Doggie run") or a mixture of words and signs from both languages (e.g. "Dame truck"). Educators can identify the child's favorite toys and include them in multiple play areas to increase opportunities for the child to use words to comment or request the toys. They can also place the toys so that they are visible but out of reach, to encourage the child to use words to request them. As needed, the adult can model a two-word request and encourage the child to repeat the model. Home visitors can help families plan simple hands-on exploration activities and embed instruction on children's individualized goals during at-home routines and play.



5 Sallee Beneke, and Michaelene M. Ostrosky, "Teachers' Views of the Efficacy of Incorporating the Project Approach Into Classroom Practice With Diverse Learners," *Early Childhood Research and Practice* 11, no. 1 (Spring 2009), <https://ecrp.illinois.edu/v11n1/ostrosky.html>.

6 Helene Arbouet Harte, "The Project Approach: A Strategy for Inclusive Classrooms," *Young Exceptional Children* 13, no. 3 (April 2010): 15–27, <https://doi.org/10.1177/1096250610364355>.

7 Jessica K. Hardy, and Mary Louise Hemmeter, "Designing Inclusive Science Activities and Embedding Individualized Instruction," *Young Exceptional Children* 23, no. 3 (September 2020): 119–29, <https://doi.org/10.1177/1096250619833988>.

8 Patricia A. Snyder, et al., "Naturalistic Instructional Approaches in Early Learning: A Systematic Review." *Journal of Early Intervention* 37, no. 1 (March 2015): 69–97, <https://doi.org/10.1177/1053815115595461>.

Shared Interactive Book Reading (SIBR). This is an evidence-based practice where adults use child-centered language facilitation strategies while reading books with children. Education staff and families can explicitly teach new concepts and words to children with disabilities who are DLLs by interactively reading a storybook with an individual child or a small group of children.⁹ One technique is to introduce new words and concepts using child-friendly definitions. Another is to link the new words and concepts to children’s prior knowledge and experiences.

SBIR can be paired with hands-on activities to help children apply words and concepts across different contexts. Education staff can also use effective language teaching strategies such as modelling, repeating words many times in many contexts, encouraging the child to repeat a word or phrase, and consciously taking turns in a conversation while giving the child enough time to respond.

Home visitors can model interactive language teaching strategies for families to use while reading storybooks with children in their home languages.



WHY BACKGROUND KNOWLEDGE IS IMPORTANT

Children make sense of the world around them by connecting new information to what they already know from previous experiences. Having prior knowledge about a topic makes it easier to read and understand a written text.¹⁰ Teaching young children with disabilities rich content knowledge in the early years can help them gain better reading comprehension skills later in school.¹¹

WHAT CAN PROGRAMS DO?

Education staff can use the [Framework for Effective Practice](#) and the individualization tiered approach, described in the Introduction to the Big 5 for All: Highly Individualized Teaching Supplement document, to plan instructional strategies that support learning for all children. Additionally, they may try more individualized and intensive supports for children with disabilities who are DLLs. When implementing activities, staff and families also need to regularly monitor how well a child is responding to the supports provided and exchange information with service providers. They can use this information to adjust the amount and types of supports, depending on the child’s progress.

SELECTING GOALS: BEHAVIORS AND SKILLS THAT SUPPORT BACKGROUND KNOWLEDGE

Head Start Early Learning Outcomes Framework (ELOF) goals associated with background knowledge appear in the Language and Literacy central domain and subdomains under the Language and Communication domain. Goals in these domains include knowledge and skills related to attending and understanding, communication and speaking, and vocabulary.

Education staff and families can use these language and communication goals for children with disabilities to promote background knowledge and concepts in both English and children’s home languages. A broader goal may need to be broken down into smaller, well-defined tasks. This helps education staff see step-by-step how well a child is learning and adjust instructional support as needed.

⁹ Gabriela Simon-Cerejido, and Vera F. Gutiérrez-Ciellen, “Bilingual Education for all: Latino Dual Language Learners With Language Disabilities,” *International Journal of Bilingual Education and Bilingualism* 17, no. 2 (February 2014): 235–54, <https://doi.org/10.1080/13670050.2013.866630>.

¹⁰ Neuman, Kaefer, and Pinkham, “Building Background Knowledge,” 145–48.

¹¹ Hugh W. Catts, and Alan G. Kamhi, “Prologue: Reading Comprehension Is Not a Single Ability,” *Language, Speech and Hearing Services in Schools* 48, no. 2 (April 2017): 73–76, https://doi.org/10.1044/2017_LSHSS-16-0033.

INDIVIDUALIZING INSTRUCTION: PARTNERING WITH FAMILIES

Children who are DLLs and have a disability may develop unique types of knowledge and understandings as they live and learn in multiple cultures and languages, while also experiencing various physical, cognitive, and/or linguistic challenges.

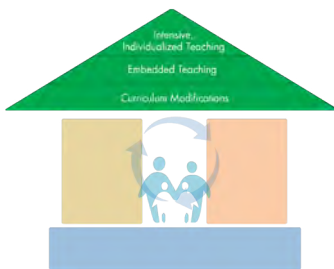
Education staff need to partner with families and service providers to gather information on each child's knowledge and understanding of concepts, both in English and in a child's home language(s).¹² Because they are learning multiple languages, children may know the same concepts in English and their home language but may not know the vocabulary in one of the languages to demonstrate their knowledge. Also, they may have developed different strengths and alternative approaches to exploring their world and communicating what they know.¹³



TEACHING STRATEGIES: FOUNDATIONAL PRACTICES

Effective practices for supporting background knowledge for all children include exploring rich and engaging topics together over time and building on children's prior knowledge. Please refer to the [Planned Language Approach Big 5 resource on background knowledge](#) to learn about specific ways to support background knowledge with infants, toddlers, and preschoolers.

TEACHING STRATEGIES: HIGHLY INDIVIDUALIZED TEACHING AND LEARNING



Curriculum modifications. When a child may need more support to engage in learning activities that promote background knowledge, education staff can make some simple changes, or curriculum modifications, to interactions and activities that promote a child's exploration of topics and build on what a child already knows. Take a look at an overview of [curriculum modifications](#) on the ECLKC to learn more or provide professional development for staff on this strategy.

Examples of modifications to help children explore rich and engaging topics together over time include:

- Adapting materials: Putting materials at optimal levels (e.g., eye level, floor level, table level, wheelchair level, standing level) and making sure they are easy to manipulate.
- Using a child's interests: Integrating a child's favorite toy, food, or other item into an activity.
- Providing peer support: Planning cooperative activities and pairing the child with a favorite peer.
- Simplifying a task: Breaking down a complicated task by breaking it down into smaller parts or reducing the number of steps.



¹² Peña, "Supporting the Home Language," 85–92.

¹³ Hardy, and Hemmeter, "Designing Inclusive Science Activities," 119–29.

Examples of modifications to help children build on their prior knowledge include:

- Using visuals such as familiar objects or pictures to help children connect new concepts to their everyday lives.
- Providing adult support, such as asking questions and offering hints to help a child connect to prior experiences (e.g., where else have you seen this before, remember when we saw one of these outside?).

Curriculum Modifications in Action: Shani

Shani is a 4-year-old girl who speaks both Somali and English. Her Head Start teacher, Karine, only speaks English but has learned a few key words and phrases in Somali so she can better communicate with Shani and make her feel welcome in the classroom. Karine is planning to grow vegetable plants from seeds with her class and wants to make sure Shani, who has motor difficulties as well as mild language delays in Somali and English, can fully participate in the project. At the start of the project, Karine had asked children's families to share the kinds of fruits and vegetables children were familiar with at home. Karine used this information when reading books about plants with children to help them make connections to what they already knew about plants and how they grow. She made sure to have pictures of Shani's favorite fruits, vegetables, and flowers when working with Shani on her learning goal of understanding word categories and relationships among words. Karine placed several picture books about plants in her library, and glued small pieces of Styrofoam to the pages to make them easier for Shani to turn. Karine also wrapped pieces of foam around markers for Shani to more easily grasp while drawing pictures of plants as they grow.

Embedded teaching. Some children may not be readily meeting their goals, even when provided with modifications and adaptations during regular hands-on exploration and storybook reading activities. They may need more systematic learning opportunities to help them make progress. Education staff can work with families and service providers in planning ways to embed instruction on individual learning objectives more frequently into daily activities.

Education staff can use an [activity matrix](#) to plan for how a child's specific learning objective will be addressed in an activity.

They will also need to plan specific teaching episodes or [teaching loops](#)—what they will say or do; the kind of support they will provide to help the child be successful, how they expect the child to respond, and what kind of feedback they will give the child.

Home visitors can help families create simple activity matrices that identify times during the day that offer opportunities to promote their child's learning goal. They can explain and demonstrate how to use teaching loops and provide feedback on the family's use of strategies.

Embedded Teaching in Action: Amal

During Bella's weekly home visit, Lina, the mother of 14-month-old Amal, shares how helpful Bella's suggestions had been in encouraging Amal to explore objects in her environment. Perhaps due to a vision impairment, Amal had not seemed very interested in playing with toys and other objects. Bella had shown Lina how to make some small changes to increase Amal's engagement with materials. Now Lina made sure lighting was sufficient and sometimes used a flashlight to draw Amal's attention to a toy. She chose brightly colored toys that made sounds and placed them on a dark sheet so they would be more visible. However, Lina was still concerned about Amal's English language development because Lina spoke Arabic with her at home. Bella reassured her about the benefits of supporting Amal's home language. Bella also shared some strategies Lina could use to help Amal communicate more. These included modeling words, using an engaging tone of voice, and giving Amal enough time to respond. Lina and Bella used an activity matrix to plan for when and how Lina could try out these strategies for promoting Amal's individual learning objective of communicating about objects, actions, and events happening in the here and now. Together they chose two times of day when Amal seemed most active and alert. Lina would describe the textures of different foods—soft, hard, dry, wet, sticky—during mealtimes. And she knew that Basam, Amal's father, would be happy to stress spatial concepts—up, down, around—during physical games with his daughter.

Intensive, individualized teaching. A few children may need more individualized and intensive teaching to learn a new skill. Education staff and families may continue to use modifications that promote engagement and embedded learning to offer increased opportunities at school and at home. They also may need to collaborate closely with service providers to use a more specialized teaching strategy to help the child make progress on a learning goal or objective.

SUMMARY

Children develop background knowledge and concepts through their daily interactions and experiences in their families and communities. Like their typically developing peers, children with disabilities who are DLLs learn better when they receive instruction in both their home language and in English. Project work involving hands-on exploration activities and shared interactive storybook reading are two effective ways to help children with disabilities who are DLLs develop new knowledge and learn new words. Education staff can collaborate closely with families and service providers to address children's individual needs. Staff can make modifications to activities, offer more frequent learning opportunities, and use specialized instructional strategies to help children fully participate in hands-on exploration activities and make progress on their individual goals.

Intensive, Individualized Teaching in Action: Mateo

Luis, a family child care provider, had been teaching his small group of toddlers about the concept of motion, helping them explore how things move in different ways. Mateo, a 2-year-old with autism spectrum disorder, had clearly been enjoying moving objects around in the classroom and playing with balls outdoors. Luis had made sure to use objects that Mateo was interested in and paired him with a favorite friend so they could explore objects together. Mateo's parents spoke mostly Spanish at home. Mateo, however, rarely used words to communicate. Luis spoke mainly in Spanish with Mateo, but he also took every opportunity to introduce English words and phrases. Luis had taken advantage of Mateo's interest in the object motion exploration activities to encourage him to use words. But despite Luis' frequent modeling and verbal prompting in Spanish and English, Mateo had made little progress. Luis shared his concern with Elena, Mateo's mother, and they agreed to ask Jasmine, the special education interventionist on Mateo's Individualized Family Service Plan for help in making a more systematic teaching plan to help Mateo progress on his individual learning goal of using words or signs to initiate conversations. Jasmine began by helping Luis think about best times during the day when he would be able to work individually with Mateo and provide more explicit instruction. Jasmine suggested using time delay during outdoor play in which Luis would hold a ball and wait for Mateo to ask for the toy. They selected a list of words to focus on in Spanish and in English (e.g. "Bola por favor," or "Ball, please," "Quiero bola" or "I want ball"). They also planned for how Luis would respond to Mateo—giving him the toy if he asked for it or directly telling him to ask. Elena proposed that she also try this strategy during weekend outings to the neighborhood playground. Luis agreed to keep weekly data on Mateo's progress and share it with Elena and Jasmine during their monthly meetings.

REFERENCES

Arbouet Harte, Helene. "The Project Approach: A Strategy for Inclusive Classrooms." *Young Exceptional Children* 13, no. 3 (April 2010): 15–27. <https://doi.org/10.1177/1096250610364355>.

Beneke, Sallee, and Michaelene M. Ostrosky. "Teachers' Views of the Efficacy of Incorporating the Project Approach Into Classroom Practice With Diverse Learners." *Early Childhood Research and Practice* 11, no. 1 (Spring 2009). <https://ecrp.illinois.edu/v11n1/ostrosky.html>.

Catts, Hugh W., and Alan G. Kamhi. "Prologue: Reading Comprehension Is Not a Single Ability." *Language, Speech and Hearing Services in Schools* 48, no. 2 (April 2017): 73–76. https://doi.org/10.1044/2017_LSHSS-16-0033.



Cheatnam, Gregory A., and Juliet E. Hart Barnett. "Overcoming Common Misunderstandings About Students With Disabilities Who Are English Language Learners." *Intervention in School and Clinic* 53, no. 1 (September 2017): 58–63. <https://doi.org/10.1177/1053451216644819>

Fahim, Donia, and Kelly Nedwick. "Around the World: Supporting Young Children With ASD who are Dual Language Learners." *Young Exceptional Children* 17, no. 2 (June 2014): 3-20. <https://doi.org/10.1177/1096250613477870>.

Guān, Chūn-Lán Debbie, and Gregory A. Cheatnam. "Bilingual Vocabulary Development for Dual Language Learners With Disabilities: Two Research-Based Approaches." *Young Exceptional Children* 21, no. 3 (September 2018): 142–56. <https://doi.org/10.1177/1096250616649223>.

Hardy, Jessica K., and Mary Louise Hemmeter. "Designing Inclusive Science Activities and Embedding Individualized Instruction." *Young Exceptional Children* 23, no. 3 (September 2020): 119–29. <https://doi.org/10.1177/1096250619833988>.

Neuman, Susan B., Tanya Kaefer, and Ashley Pinkham. "Building Background Knowledge." *The Reading Teacher* 68, no. 2 (October 2014): 145–48. <https://doi.org/10.1002/trtr.1314>.

Office of Head Start. "Head Start Program Performance Standards: Definitions." Accessed January 18, 2022. <https://eclkc.ohs.acf.hhs.gov/policy/45-cfr-chap-xiii/1305-2-terms>

Peña, Elizabeth D. "Supporting the Home Language of Bilingual Children With Disabilities: From Knowing to Doing." *Journal of Communication Disorders* 63 (September–October 2016): 85-92. <https://doi.org/10.1016/j.jcomdis.2016.08.001>

Simon-Cereijido, Gabriela, and Vera F. Gutiérrez-Clellen. "Bilingual Education for all: Latino Dual Language Learners With Language Disabilities." *International Journal of Bilingual Education and Bilingualism* 17, no. 2 (February 2014): 235–54. <https://doi.org/10.1080/13670050.2013.866630>.

Snyder, Patricia A., Salih Rakap, Mary Louise Hemmeter, Tara W. McLaughlin, Susan Sandall, and Mary E. McLean. "Naturalistic Instructional Approaches in Early Learning: A Systematic Review." *Journal of Early Intervention* 37, no. 1 (March 2015): 69–97. <https://doi.org/10.1177/1053815115595461>.

