

BEYOND THE >> ITSY BITSY SPIDER

In this story we show how two teachers develop learning goals for children that are aligned with their program’s school readiness goals (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/docs/sr-goals.pdf>) and state early learning standards. The teachers plan meaningful learning activities that are informed by research-based curriculum. They also use and discuss multiple assessment methods to document children’s learning (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/center/practice/ISS>), understand children’s needs, and make adjustments to their teaching. The information the teachers collect is combined with data from other classrooms to reveal patterns of progress for all children in the program and to support program improvement efforts.

Over the past several days, Paige notices a large spider spinning an enormous web outside of her classroom window. She also observes that the children frequently move to the window to look at the spider, and they make comments and ask questions about what they see. With mostly three-year-olds in her class, Paige decides to use the children’s interest in spiders as a way to increase their curiosity and work on their language skills (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/eecd/Domains%20of%20Child%20Development/Science/ScienceInThePreschoolClassroom.pdf>).

Paige invites Michelle, a pre-kindergarten teacher, to join her in taking advantage of this opportunity to work on scientific thinking (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/center/practice/ISS/foster.html>). Michelle brings her children, who are four years old, to Paige’s classroom to begin their exploration of spiders. Paige and Michelle work together to talk about the spider outside of the window (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/center/practice/ISS/t-t-conversations.html>). Both teachers observe and take notes on the children’s behaviors and ideas.



At the end of the day, the teachers meet with their teaching teams and some parent volunteers to discuss their observations. They decide to conduct a spider observation project over multiple weeks. They identify specific learning objectives for the project and consider how they align with their program-wide school readiness goals in the five essential domains of the Head Start Child Development and Early Learning Framework (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/docs/sr-goals.pdf>) and with their state’s early learning standards (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/docs/state-learning-stds-03-2013.pdf>).

Paige and her team decide that the spider project lends itself well to promoting learning goals

focused on approaches to learning and language and literacy. Michelle and her team decide to focus on scientific thinking goals that align with school readiness goals for cognition and general knowledge, as well as on language and literacy (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/docs/sr-goals.pdf>). The teachers prepare a letter that asks families to suggest activities about spiders for the classroom and home and to share observations on their child’s interest and knowledge in the subject.

Learn more about how Paige and Michelle develop plans for implementing meaningful activities and use research-based curriculum and evidence-based teaching practices (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/center/practice/ISS>) to support children's learning goals.

Paige is pleased about the excitement the spider and web have generated among the children in her classroom, and to build on their interest, she decides to use evidence-based teaching strategies (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/center/practice/ISS>) that promote children's approaches to learning. Paige follows the children's lead in planning their learning experiences. She uses art, songs, dance, and music to encourage children to learn more about spiders and maintain their attention to the topic. She also uses effective language facilitation strategies to promote vocabulary (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/center/practice/ISS/novel-words.html>) and children's general knowledge about spiders through conversations, stories, picture books, and dramatic play. She asks families (http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/eecd/Families-Parent%20Involvement/Ongoing%20Communication/edudev_art_00410_061606.html) to identify songs, stories, and books about spiders that represent the diverse cultures and languages of the children in her classroom. Based on this information and on guidelines from the research-based comprehensive curriculum adopted by her program, she develops a curriculum web to plan how she will implement activities to support children's learning goals.

Michelle notices that most of her children already know quite a bit about spiders, so she takes them step-by-step to a higher level of understanding about them (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/center/practice/ISS/ask.html>). She identifies effective teaching strategies to promote the use of the scientific method (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/center/practice/ISS/scientific-method.html>) as well as activities that will provide children opportunities to observe, gather information, ask questions, make predictions, give explanations, and draw conclusions (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/>

[center/practice/ISS/foster.html](http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/center/practice/ISS/foster.html)). She will use language facilitation strategies to introduce more complex vocabulary and encourage children to express their ideas using different forms of language (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/center/practice/ISS/expand.html>). Michelle will also promote literacy goals by encouraging children to use drawings and writing to express their ideas, and she will document their activities.

In addition to family input and her own observations, Michelle uses her program's curriculum and conversations with children to get more information about what the children know and like to help her create the curriculum web plan and extend learning experiences. Paige and Michelle together plan a final presentation about the spider study. They invite families and discuss ways for parents to continue children's excitement and learning at home when the school project is over.

Paige follows the children's lead in planning their learning experiences. She uses art, songs, dance, and music to encourage children to learn more about spiders and maintain their attention to the topic.

Take a look at how Paige and Michelle use a comprehensive program-wide assessment tool (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/eecd/Assessment/Ongoing%20Assessment/lfa.html>) and other methods to collect information on children's learning. See how they use information from their ongoing observation and interviews with the children, as well as input from families, to plan learning that is intentional and meaningful for their children and to adjust instruction as needed.

Both Paige and Michelle use a data-based assessment tool aligned to their program's curriculum to collect data that can be aggregated with data from other classrooms at the program level. They also use several other methods to monitor how the children are learning

(<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/center/practice/ISS/plan.html>). For this project on spiders, they decide to use a combination of checklists, anecdotal records, pictures, videos (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/center/practice/ISS/collect.html>), and work samples (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/center/practice/ISS/use-samples.html>) that will go into each child's portfolio.

For example, they develop a simple checklist to record children's thinking skills. They use anecdotal notes to record children's language skills, take photos, and collect samples of children's drawings and early writing. They also invite families to share notes and photos of children's learning at home. To make sure that data are collected on an ongoing basis, they develop a data collection plan that identifies what data to collect and who will collect data and when.

As the teachers regularly review the assessment information with their teaching teams, both Paige and Michelle decide to make some modifications to improve their instruction.

Paige, for example, notices that a child whose family only recently arrived in the United States tends to stay alone and demonstrates little interest in the activities. Paige wonders if learning a few words in the child's native language and pairing her with one of the more outgoing children might encourage her to express herself more easily (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/eecd/Domains%20of%20Child%20Development/Language%20Development%20and%20Communication/meetingthelanguage.pdf>).

Michelle notices that a child is hesitant to draw or write, so she introduces an inexpensive camera to make it easier for him to participate in documenting his observations (<http://depts.washington.edu/hscenter/modules-curriculum-modifications>). When she also notices that some children shift their interest from the spider to the web, she expands on the concept of weaving and invites to class a parent who is a weaver herself. Paige and Michelle use information from both children and families to plan learning that is intentional and meaningful for their children. To prepare for the final presentation at the end of the four-week project, the teachers examine children's scores on the program assessment tool and information from multiple measures collected in

children's portfolios to see how well all children met their learning goals during the project.



Paige is pleased to see that all children learned new concepts about spiders and were curious and engaged in the project. From her notes on children's language she knows that most children have expanded their vocabulary and are using longer sentences. But a small group of children has not progressed. Paige decides to conduct some small group activities with these children to learn more about their language skills. She also talks with their families to find out more about language skills at home. If needed, she will consult with the speech language pathologist for ideas on effective strategies to facilitate children's language development (http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/eecd/Domains%20of%20Child%20Development/Language%20Development%20and%20Communication/edudev_bul_00017_012207.html#strategies). Michelle is also pleased with children's interest in the spider project. Many children are using a broader variety of more complex questions such as Why? and What if? They are also better able to provide explanations using their drawings and photos to back up their findings! Two children quickly expanded their interest beyond spiders to other insects. Michelle looks for additional resources on teaching science (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/center/practice/fp/fpArchive.html>) to plan a project with a broader focus on insects. She also makes sure to include more challenging activities (http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/eecd/Individualization/Children%20Who%20are%20Advanced%20in%20Development/edudev_art_00002_060305.html) and incorporate

additional learning goals around number concepts and measurement (<http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/eecd/Domains%20of%20Child%20Development/Mathematics>) for the two children who completed the project faster than others.

Paige and Michelle summarize main findings from their analysis into brief, easy to read reports and colorful bar graphs to share with children's families and program staff at the presentation. They also select examples of teaching activities that were especially engaging for the children and samples of children's work that documented their learning. After the presentation they post these materials on a bulletin board outside their classroom.

Find out how Paige and Michelle share findings from the spider project, work with their education manager to identify learning patterns for groups of children in their program, and develop plans to address children's needs more effectively. See how they use data to support program-wide improvements.

Data collected by Paige and Michelle using the program assessment tool are aggregated with information from other classrooms to conduct the program's mid-point

data analysis. Program administrators and teachers meet to discuss progress patterns for children's learning across domains and compare results to those from the beginning of the school year. Overall most children in the program are on track to meet their school readiness goals. But in all classrooms, a few children fail to show growth in vocabulary. Paige shares some strategies she used following her consultation with the speech therapist and explains how they have helped children make progress in their language skills.

Children in Paige's and Michelle's classrooms show more rapid progress than those in the other preschool classrooms in their use of scientific thinking skills. Michelle shares the information she found about resources for teaching science and offers to help her colleagues with planning learning activities. Based on this overall program-level analysis and discussion, the team agrees to introduce a supplemental curriculum for teaching science and to provide teaching staff with additional professional development focused on teaching vocabulary (http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/center/practice/fp/fpArchive_pg2.html).

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