

## **Project STAR**

Head Start centers provide an excellent context for the implementation and success of family-based interventions, particularly home visiting. Based on a developmental–ecological model, a universal family-centered intervention was implemented with Head Start families.

**Project STAR** (Steps to Achieving Resilience) was three-year, federally funded research project which consisted of an intervention with preschoolers enrolled in the Head Start program in Lane County, Oregon, United States. The project was conducted from 1999–2003 by the Early Childhood Research Unit of the University of Oregon College of Education. The principal investigators were Dr. Ruth Kaminski, one of the co-authors of the DIBELS early literacy assessment, and Beth Stormshak.

The goal of the program was to increase literacy skills of at-risk children by improving their learning environments by increasing the amount of planned and focused activities. The curriculum had two components: a classroom ecology component and family-focused intervention activities.

### **Classroom ecology**

The classroom ecology component is designed to help teachers develop the classroom environment in ways that promote the development of important literacy skills in children. The teachers were trained to focus on the overall environment in the classroom focusing on the physical environment (e.g., space and materials), the planning and scheduling of teacher activities and the structuring of a daily schedule, and improving the social environment by teaching social roles and expectations, monitoring students social interactions, and interacting with students regularly. One of the most important parts of the classroom ecology component were the Circle Time Activities which were instructional periods led by the teacher that focused on either sharing or vocabulary that lasted about 10 minutes each. Teachers were instructed to review skills learned previously, integrate new and old knowledge, and practice specific skills.

Another important component of classroom ecology was the Activity-Based Intervention (ABI) that provided an opportunity for children to learn critical skills through play and routine activities that are developmentally-appropriate and interesting to preschoolers. ABI's used here were related to skills learned during Circle Time Activities.

### **Family-focused intervention**

The family-focused intervention encouraged parents to instigate non-directive play with their preschoolers and responsive communication. They were also encouraged to attend to their child's emotions and actively discipline their children. Children were provided with the skills used in the classroom component each week and instructed to give their children opportunities at home to practice skills learned in the classroom. The intervention also included a STAR Home Visiting curriculum where the initial focus was on parent-child joint storybook reading and the development of language skills. As the child progressed through preschool the focus shifted to phonological awareness skills and knowledge of the alphabet.

Results suggest that both parenting groups and home visiting interventions are effective at enhancing parenting skills: however, home visiting programs have a higher participation rate. Additionally, home visiting by familiar staff was particularly successful at improving parenting skills at follow-up. Results suggest that embedding targeted interventions in universal strategies can be an effective means of engaging families in services. The results have implications for service delivery methods in early childhood as a means of enhancing parent participation.

### **SAIL Intervention**

**SAIL**, Storybook Activities for Improving Literacy, was an intervention where Head Start teachers were trained to use storybook reading to improve the literacy skills, particularly vocabulary skills, of preschool children. All of the children were enrolled in Head Start classrooms in Lane County, Oregon who were also participants in Project STAR a larger study conducted by the University of Oregon. The intervention included activities that targeted vocabulary, comprehension, and narrative ability. It was conducted for 20 minutes a day, approximately four days a week for eight weeks.

The trained teachers were instructed to read assigned storybooks to their classrooms for the allotted period of time. The storybooks used in the intervention were age appropriate, had numerous distinct sequence events, and varied vocabulary. Three vocabulary words were assigned per book to be introduced to the preschoolers that were related to the story and likely to be unfamiliar words. Some examples of selected words were ukulele, magician, optometrist, flashlight, crane, and restaurant. Activities were planned for all four days the book was assigned.

### **Day One**

Introduction to the author, children had the opportunity to predict the events of the story based on the cover of the book. The teacher read the story, pausing to define assigned vocabulary words. At the conclusion of the story the teachers asked comprehension questions.

### **Day Two**

On the second day, the teacher re-introduced the author and reminded the children of the three assigned vocabulary words. The teachers showed pictures of the vocabulary words and discussed broader categories that these words could fall into (e.g, "elk" falls into the category of "animals").

### **Day Three**

Students retold the story using the pictures in the book, they were encouraged to use the three vocabulary words while retelling the story. The teacher then asked review-orientated questions focusing on the vocabulary words.

### **Day Four**

On the final day, the children acted out events of the story beginning by stating the three vocabulary words. The children were assigned to play different roles of characters in the story.

## **Results of the Intervention**

Preschoolers who participated in the intervention improved on measures of vocabulary and narrative ability. However, there were no significant gains in comprehension or Print Awareness. This study differed from previous studies in that it took place in a large group setting, to accommodate the resources available in typical Head Start programs, and in that teachers spent four days on one storybook. The study further supported that reading aloud to children may not be a sufficient practice to increase literacy skill.