Supermarket Speak Toolkit:

Increasing Family Talk and Engagement in Economically Disadvantaged Communities

Kathy Hirsh-Pasek, Ph.D., Roberta M. Golinkoff, Ph.D., Katherine Ridge, & Brenna Hassinger-Das, Ph.D.

with Amanda Morris, Ph.D., & Martha Roblyer, Ph.D.

Summary of Research Study

Nearly one in every four children live in poverty in the United States, and these children typically enter kindergarten with lower language abilities than their higher-income peers. Increasing the amount and quality of parent-child conversations can combat this language disparity.

Our recent study (Ridge et al., 2015*) tested a subtle, low-cost intervention to stimulate parent-child conversations during a trip in the grocery store.

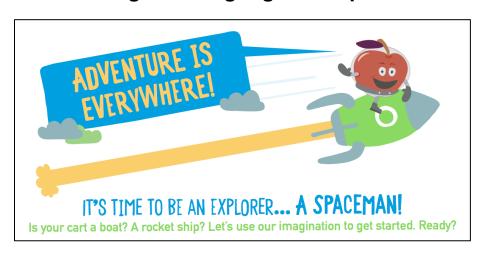
In our experiment, parents and children were discreetly observed while shopping in grocery stores in low- and middle-socioeconomic status (SES) communities.

Parents in the low-income communities generally interacted with their children less than parents in the middle-income communities, consistent with previous research. However, in our study's result, when attractive, engaging signs were posted around the store (see **Figure 1**), the low-SES families talked significantly more than without the signs, and just as much as the middle-SES families.

The signs led parents to use more descriptive language and to ask their children more questions. Children also asked significantly more questions to their parents.

*Ridge, K. E., Weisberg, D. S., Ilgaz, H., Hirsh-Pasek, K., & Golinkoff, R. M. (2015). Supermarket speak: Increasing talk among low-socioeconomic status families. *Mind, Brain, and Education, 9*, 127-135. doi: 10.1111/mbe.1208

Figure 1. Signage Example



Based on the study's findings, this project yields in two suggestions:

- a) These signs are a cost-effective, unobtrusive intervention that stimulates communication
- b) Similar interventions could improve children's language development in families' natural environments

Signage Creation and Selection

The creation and selection of signs starts from asking what concepts you might want to address through the signs. Below are four concept categories to use:

- i) Describing objects: "What color is an avocado?"
- ii) Categorizing and comparing objects: Which is heavier—an orange or a pineapple?"
- iii) Understanding spatial relationships: "What foods do you see on the top shelf? What foods are on the bottom shelf?"
- iv) What we do with foods, where foods come from, etc.: "Where does milk come from?"

On the next page are some examples of prompts you might use on your signs (see **Figure 2**). These can be adapted to suit available signage options in any given section of the store, or to suit the products that are visible in a given section of the store. Signs could also be tailored based on particular topics.

Customization Options

What should always be present?

- 1. Ask questions that encourage more than Yes/No answers. For example, "What can we cook with broccoli?"
- 2. Ask questions that are relevant to what children know. For example, "What is your favorite vegetable? Why?"
- 3. Ask a mix of content questions ("What color is an eggplant?") and process questions ("How many grapes are in this bunch?)

What can be customized?

- 1. You can customize your prompts and signs to fit your specific circumstances. For example, you can create signs in a language other than English.
- 2. The design, look, and placement of the signs

How to write your own prompts

- 1. Basic concept words you might want to include:
 - Direction (up, down)
 - Position (inside, outside, over, on, under, next to, beside, above, below, high, low, behind, in front of)
 - Size (large, big, small)
 - Comparison (longer, longest, shorter, shortest, biggest, smallest, heaviest, lightest)
 - Texture (smooth, rough, soft, bumpy, prickly)
 - Weight (heavy, light)
 - Shape (round, oval, square, rectangle)
 - Numerical (one, two, three, etc., how many, count)
 - Colors (red, blue, green, yellow, orange, etc.)

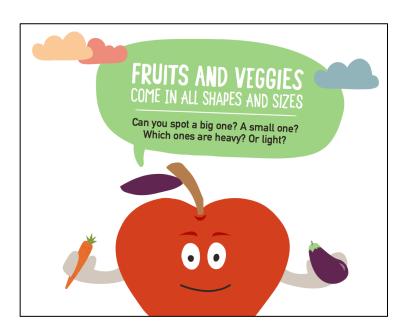
Figure 2. Examples of Signs Based on Different Prompts

Specific to Objects		
•What color is? What else do you see/eat that is the sam	e color?	
•What shape is? What else do you see/eat that is the san	ne shape?	
•How does a/n feel? Rough? Smooth?	·	
•Do you (like to) eat cooked or uncooked? (pumpkin, car	rots)	
General Conversation Prompts		
•What is your favorite (fruit, vegetable, bread, dairy)? Why?		
•What can we cook with?		
•What other foods do you like to eat with?		
· · · · · · · · · · · · · · · · · · ·		
·		
•What should we cook for dinner? What is your favorite food? Is the grain?	at a fruit, vegeta	able, meat, dairy, o
•What should we cook for dinner? What is your favorite food? Is the grain?	at a fruit, vegeta	able, meat, dairy, o
•What should we cook for dinner? What is your favorite food? Is the grain? Math-Related Prompts	at a fruit, vegeta	able, meat, dairy, o
•What should we cook for dinner? What is your favorite food? Is the grain? Math-Related Prompts •What shapes can you find?	at a fruit, vegeta	able, meat, dairy, o
What should we cook for dinner? What is your favorite food? Is the grain? Math-Related Prompts What shapes can you find? How many can you find?	at a fruit, vegeta	able, meat, dairy, o
What should we cook for dinner? What is your favorite food? Is the grain? Math-Related Prompts What shapes can you find? How many can you find? What is up high in this aisle? What is down low?	at a fruit, vegeta	able, meat, dairy, o
 •What should we cook for dinner? What is your favorite food? Is the grain? •Math-Related Prompts •What shapes can you find? •How many can you find? •What is up high in this aisle? What is down low? •What is the biggest thing in this aisle? What is the smallest? 		
•What should we cook for dinner? What is your favorite food? Is the grain? Math-Related Prompts •What shapes can you find? •How many can you find? •What is up high in this aisle? What is down low? •What is the biggest thing in this aisle? What is the smallest? •There are big and small things all around us! Can you find something.	ng big? Somethin	ng small?
 •What should we cook for dinner? What is your favorite food? Is the grain? •Math-Related Prompts •What shapes can you find? •How many can you find? •What is up high in this aisle? What is down low? •What is the biggest thing in this aisle? What is the smallest? •There are big and small things all around us! Can you find somethin •There are shapes all around us! Can you find these shapes? (circle, 	ng big? Somethin	ng small?
 What do you like to eat for breakfast? Dinner? What should we cook for dinner? What is your favorite food? Is the grain? Math-Related Prompts What shapes can you find? How many can you find? What is up high in this aisle? What is down low? What is the biggest thing in this aisle? What is the smallest? There are big and small things all around us! Can you find somethin There are shapes all around us! Can you find these shapes? (circle, Are there more or? How many different kinds of do you see? 	ng big? Somethin	ng small?
 •What should we cook for dinner? What is your favorite food? Is the grain? •Math-Related Prompts •What shapes can you find? •How many can you find? •What is up high in this aisle? What is down low? •What is the biggest thing in this aisle? What is the smallest? •There are big and small things all around us! Can you find somethin •There are shapes all around us! Can you find these shapes? (circle, •Are there more or? 	ng big? Somethin	ng small?

Making it Happen

How to approach stores?

- 1. Ask to schedule a meeting with the store manager or owner. Note, store managers may not be able to make marketing decisions.
- 2. At the meeting, provide the manager with information on how the project can help the community, the cost range for implementing the project, examples of signs.
- 3. In addition to talking with managers, also talk with store staff. Store staff is there on a day-to-day basis and can really make a difference to project success. For example, they will be less likely to move or take down signs if they know about the project.



What do you need?

- 1. Signs should be made of durable materials, such as cardboard or laminated paper
- 2. Make sure signs are large enough that people can read them (think 29" x 33" for hanging signs) with easy to read fonts
- 3. Colorful signs will attract attention, but it will be important not to make signs too cluttered with words or images
- 4. Aim to create at least 5 signs (1 introductory sign for the front of the store letting shoppers know about the signs, as well as 4 signs to be placed in one or more areas of the store

5. Placement

- i. Aim to highlight healthy foods, such as fruits, vegetables, and dairy, instead of placing signs near sodas or junk food
- ii. Depending on the number of signs you choose to use, place them in one or more areas around the store (without oversaturating one particular area with too many signs, think no more than 5 per area)
 - iii. Signage Display Options
 - Floor stickers
 - Eye-level signage: freezer or refrigerator doors, available areas surrounding merchandise, attached to produce shelves/racks
 - Ceiling banners
 - Hand baskets
 - Shopping carts
 - Check-out area displays

Cost options

This project has a wide range of costs (see Figure 3).

Figure 3. Cost Range of Supermarket Speak Project



- Design and draw signs yourself
- Print and laminate at a local outlet
- Only create a small number of signs (5-6), focusing on target areas like the produce or dairy case
- (The original study was done for a total cost of \$60)

- Design and draw signs yourself
- Print and laminate at a local outlet
- Create a larger number of signs to place throughout the store
- Hire a graphic designer to design signs
- Print and laminate at a local outlet
- Create a larger number of signs to place (7+) throughout the store, focusing on target areas like produce or dairy case

Evaluation

How to measure effectiveness?

- 1. Survey parents to see if they are noticing and interacting with the signs with their children.
- 2. Here are some sample questions you might ask:
 - Which sign(s) did you notice?
 - Did you or your child/ren notice the character signs in the store today?
 - Did you talk to your child about the sign(s)?
 - What did the signs prompt you to talk about? (e.g., colors, shapes, sizes, weights)
 - Did your child talk to you about the sign(s)?
 - What did the signs prompt your child to talk about? (e.g., colors, shapes, sizes, weights)
 - Would you have preferred the signs to be in another language? If so, which language?

How to measure the impact?

- 1. Survey parents to see if their shopping experience changes due to the intervention of the signs.
- 2. Here are some sample questions you might ask:
 - Did the character signs make your grocery shopping experience any different than usual? If so, how?
 - Did you make any purchases related to your experiences with the signs?

How to track respondents' demographics?

- 1. Survey parents to gather demographics information of parents and their child/ren.
- 2. Here are some sample questions you might ask:
 - May we ask the age(s) of the child/ren accompanying you today?
 - May we ask your approximate age range? [Provide an example, "40-50"]
 - What is your home language?
 - What other languages do you speak?
 - Would you have preferred the signs to be in another language? If so, which language?

