Pairing Picture Books with Apps to Contextually Address Language Objectives

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Disclosures

- Receive royalties for 5 apps developed with Smarty Ears Apps.

- Contractual relationship with Mindwing Concepts, create blog content and presentations related to products such as Story Grammar Marker®, receive honoraria.

- Employed by Ely Center, LLC (Newton, MA).

- Presented for various local and national organizations on tech integration.

- Receiving honorarium for this presentation

- Nonfinancial: creator of blog SpeechTechie, contribute columns for ASHA Leader.

Support for using Picture Books in the Literature:

- The act of reading books aloud interactively and using scaffolding to support children's use of more advanced syntax, vocabulary and critical thinking is itself an activity which addresses clinical objectives (Beed, Hawkins, & Roller, 1991).

- Clinicians can also select books that lend themselves to pre- and post-reading activities that extend the context of the story. These can include such strategies as art activities, story generation, discussion webs, and dramatic play (Hoggan & Strong, 1994).

- Using books in therapy supports discourse comprehension and production for narrative and expository text (Westby, 1990), as well as building metacognitive strategies such as recognizing text structure (Beck & McKeown, 2003).

Models for Pairing Books and Apps

- Post-Book Dramatic Play- Acting out elements related to a story can be used to target sequencing skills, sentence formulation and overall story comprehension, and enhances children's ability to explain ideas (Putnam, 1991). Apps can provide visuals that scaffold language and sequencing during the process of play, or rehearse low-tech play.

- Post-Book Art Activities- Reading picture books interactively with students can provide a context for drawing or creation within similar contexts. Models within books can influence the content and language use of students while creating a visual response (Bartelo, 1984). Apps provide an avenue to target language while creating visual artworks simply and quickly and omitting some of the time-consuming aspects of drawing or crafting.

Models for Pairing Books and Apps

- Post-Book Discussion Webs/Graphic Organizers- Visual diagrams map elements of a text or topic to develop categorization and association skills; webs can also be employed to have students respond to higher-level evaluative questions (Alverman, 1991). Also create low-tech concept maps or organizers, providing a context for topically-related discussion.

- Post-Book Story Grammar Cueing- Teaching students story elements such as character, setting, initiating event and conclusion has been shown to improve narrative comprehension and formulation (Davies, Shanks & Davies, 2004).

Exemplar Book and App Pairings by Activity Type (with demos)

Dramatic Play Activities

- Night Train by Caroline Stutson and Catherine Tillotson- a young boy experiences an evening ride on a train through vibrant descriptions related to the five senses, paired with Toca Train ($2.99), an interactive toy train app that can be used to develop spatial concepts, sequencing, descriptive language and play scripts.

- Llama Llama Holiday Drama by Anna Dewdney, in which a young llama has difficulty with the problem of waiting for gifts, thus targeting problem solving and social cognition, paired with Bag Game ($1.99), which allows the virtual "wrapping" of a picture gift, which can then be exchanged and opened in a dramatic play activity targeting social behaviors around giving and receiving gifts.

Exemplar Book and App Pairings by Activity Type

Art Activities

- The Big Orange Splot by Daniel Manus Pinkwater- a can of paint dropped onto a roof by a seagull inspires an entire neighborhood of people to transform their houses to suit their dreams, as paired with Draw A House (Free), an app that can be used to target categories and descriptive language through the creation of houses from building blocks (walls, roofs, doors, backgrounds etc) and "app-smashed" with Doodle Buddy (Free) to add additional detail.

- Shortcut by Donald Crews- this suspenseful complete episode narrative operates according to a visual/spatial schema that can be used to target advanced concepts, especially when paired with Google Earth and/or Doodle Buddy (both Free) to "map" the story.

- Todd's TV by James Proimos, exploring the potential overuse of technology in the home through a problem-solution structure, can be paired with TeleStory (Free), which prompts storytelling and explanation by creating videos with "tropes" or themes such as newscasting, musical competition shows, and spy or space dramas.

Exemplar Book and App Pairings by Activity Type

Story Grammar/Expository Cueing or Discussion Webbing

- Many books exhibiting typical narrative structure are useful for teaching story elements including I Want My Hat Back (Klaussen) and Wow, City! (Neubecker), and paired with apps geared toward teaching story grammar cueing, including SGM® (Story Grammar Marker, $14.99), Kidspiration Maps and Popplet

- Gila Monsters Meet You At the Airport by Marjorie Sharmat and Byron Barton, in which two boys experience anxiety about moving East or West, respectively, and imagine exaggerated problems about their new homes, paired with Kidspiration Maps (Free to try, then $9.99), a tool for constructing visual maps for categorizing (e.g. problems in the East vs. West) and responding to more complex questions.

- The Runaway Pumpkin by Kevin Lewis, a sequential and categorical narrative, suggests a visual retelling easily produced in "whiteboard" apps such as Explain Everything ($4.99)

Why Series and Sequels?

- Context allows for easier planning and semantically/narratively deeper intervention.

- Contextualized language intervention is supported by studies such as (Gillam et al, 2012): "signs of efficacy in an intervention approach in which clinicians treated multiple linguistic targets using meaningful activities with high levels of topic continuity."

- SLPs should maintain "therapeutic focus" (build skills and strategies) within meaningful context- book series are one way to approach this (Ukrainetz, 2007, Ehren, 2000).

- Can analyze series for characteristics between books that lend themselves to language interventions.

Therapeutic Interactions in context

Apply to both books and apps!

Semantic Expansions

Add new, relevant information to the student's utterance (also called extensions)

Student: Him wants the bus.
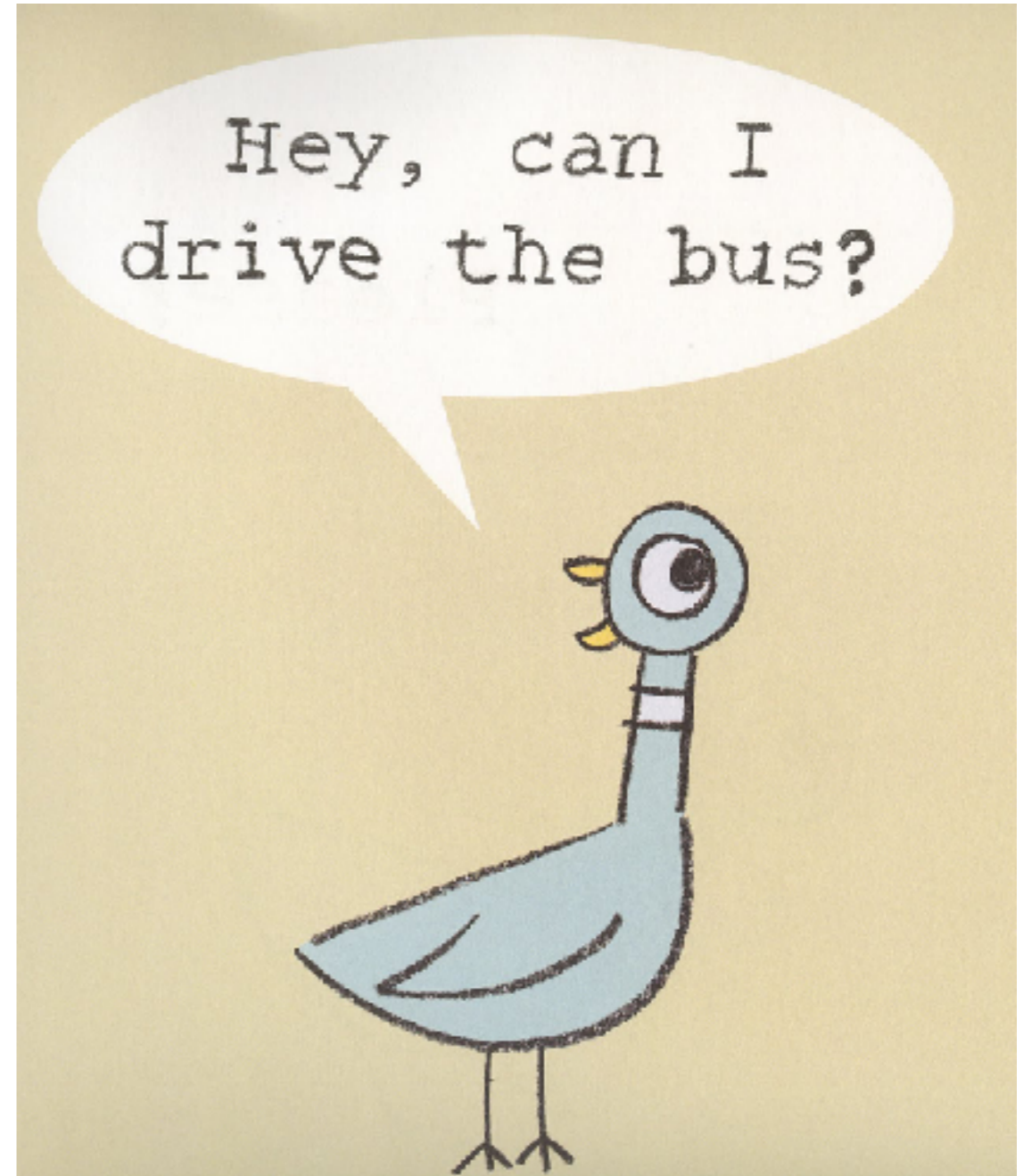Clinician: Yes, the Pigeon wants to drive the bus.
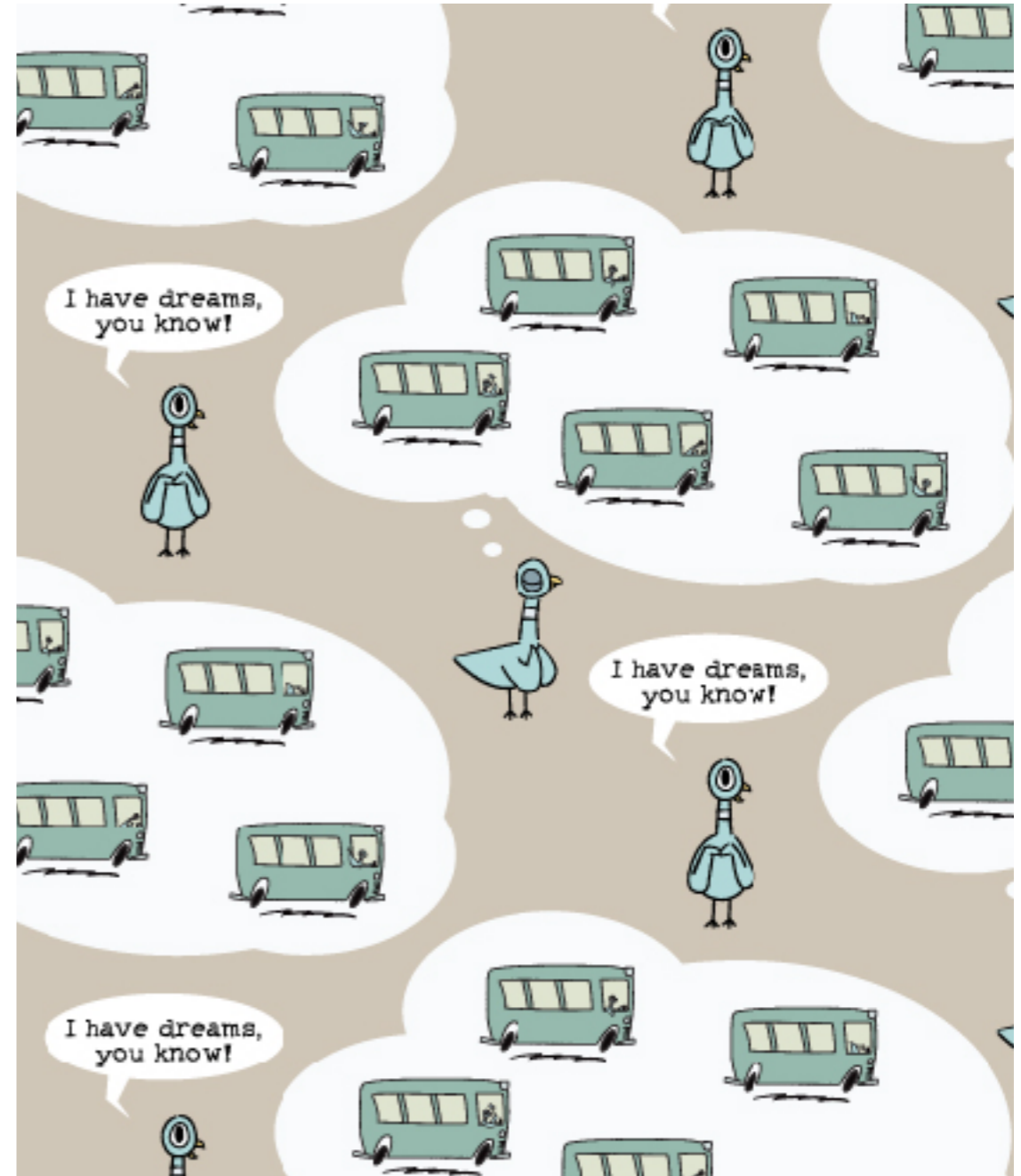
Syntactic Expansions

Provide an immediate verbal grammatical model

Student: Him want to drive.
Clinician: Yes, He wantS to drive.
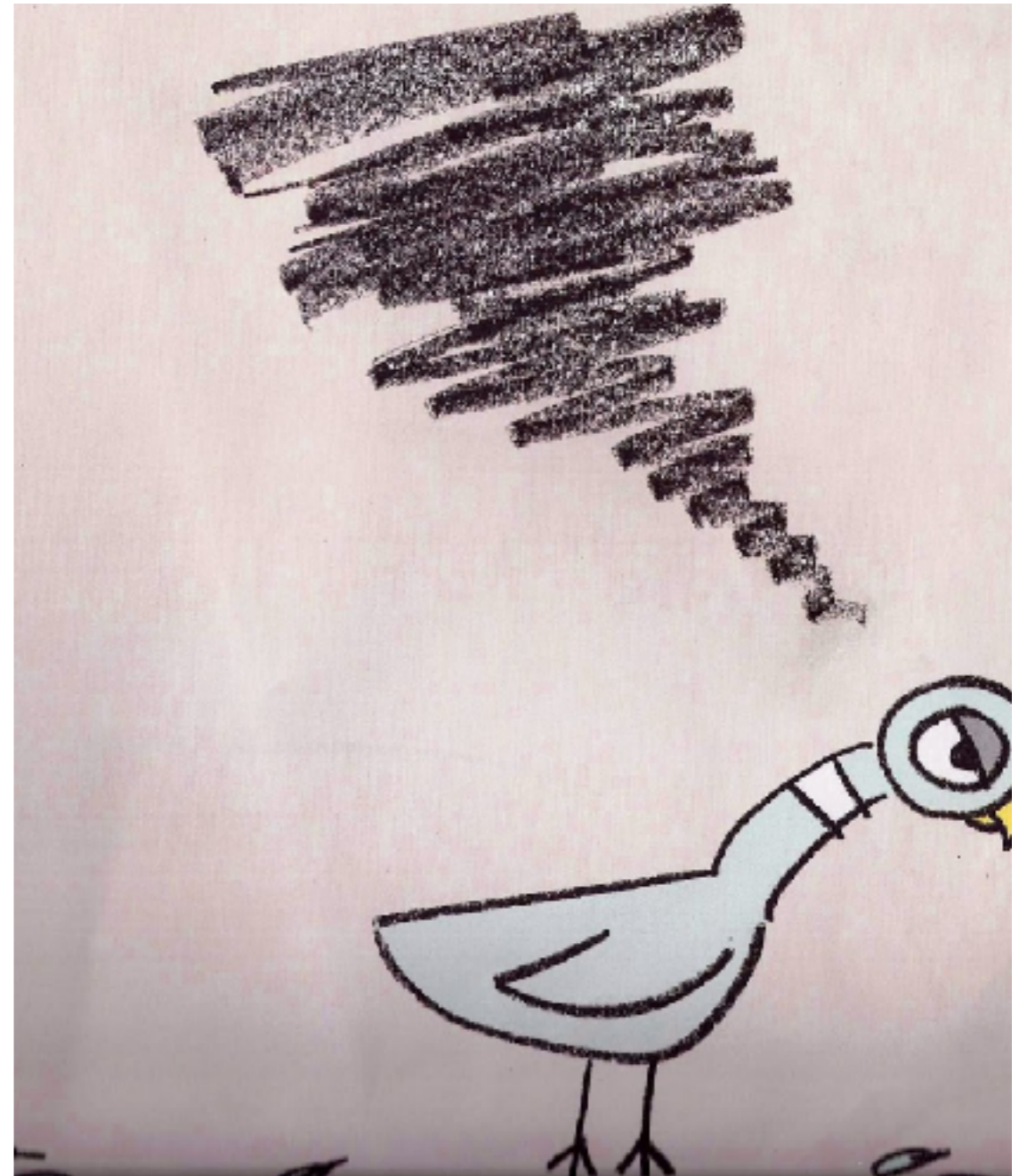
Elaboration Questions and Vertical Structure

Prompt the student to expand, provide model of more complex structure

Student: He's so angry.
Clinician: Why is he angry?
Student: He can't drive the bus.
Clinician: He's so angry because he can't drive the bus.

Questions to elicit utterances

Questions elicit a target structure or skill.

Clinician: Before we go, tell me what you see along the road.

Dr. Panda Bus Driver ($2.99)

Stating the goal or target

Making explicit what you will be working on while reading or playing.
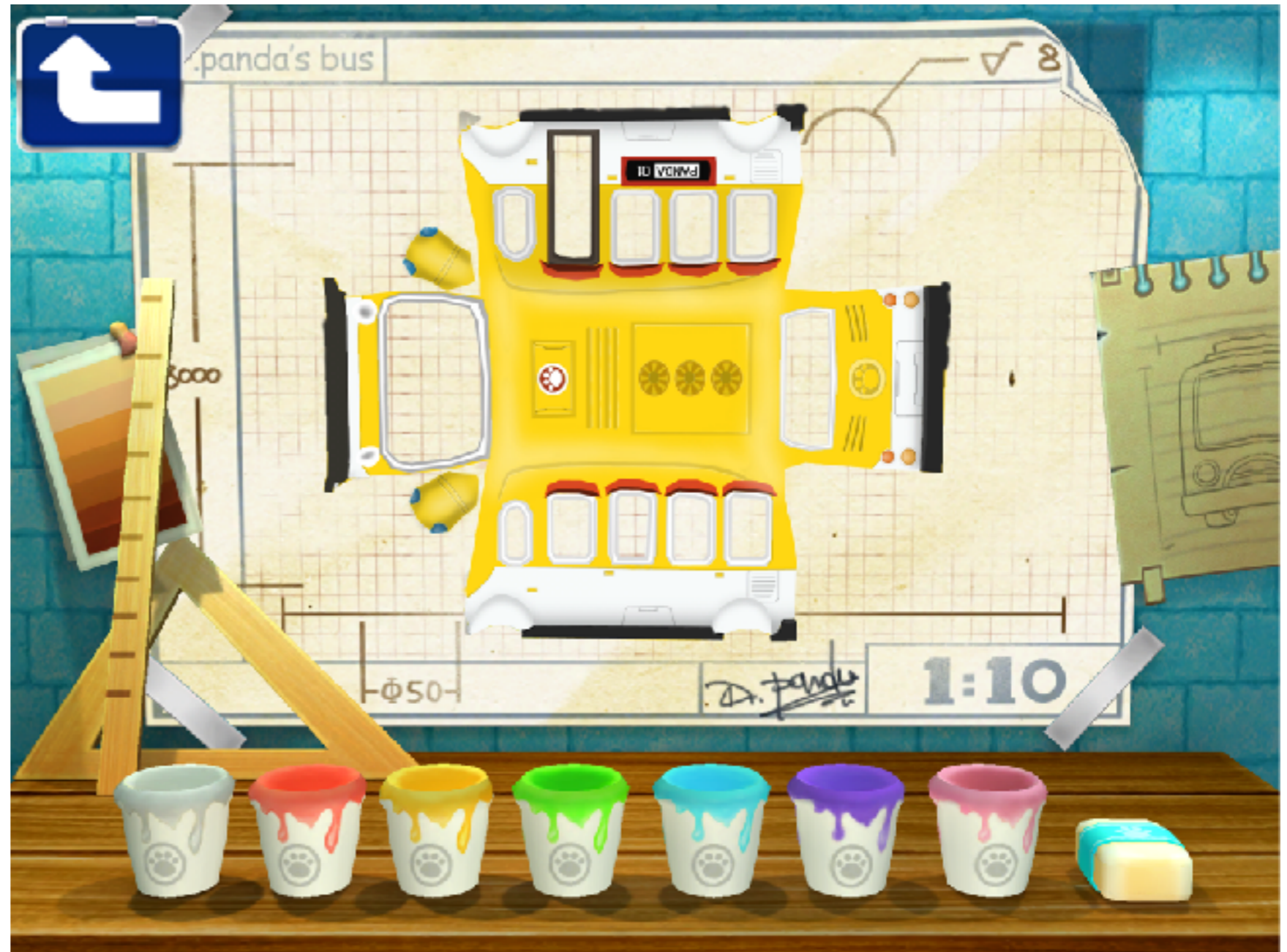
Clinician: We are going to pretend we're the Pigeon and he's NOT GOOD at driving the bus. Let's stop for some things and let's not stop for other things.

Compare or Contrast

Elicit comparative or contrasting descriptions (adversative *but*)

Clinician: Let's paint the bus… what color are the doors? What about the roof? …yes, the doors are red **but** the roof is blue!

Criteria for Selecting "Out of Box" Apps?

FIVES

Fairly Priced

Interactive

Visual

Educationally Relevant

"Speechie"

Other Possible Pairings with Pigeon:

- Language-related characteristics of this series: emotions, Zones of Regulation, 5-Point Scales, facial expressions, metalinguistics (*convince, promise*), "Rock Brain" Moments (see Superflex Curriculum), dialogue/role playing

- Don't let the Pigeon Run this App! ($5.99)

- The Pigeon Wants a Hot Dog with More Grillin' ($1.99)

- The Pigeon Wants a Puppy with My Town: Pets ($2.99)

Resources Supporting the Use of Picture Books in Therapy (See Resource List)

List of Resources for Integrating with Books and Apps

- Books are for Talking, Too! by Jane Gebers (Pro-Ed)

- Contextualized Language Intervention: Scaffolding PreK-12 Literacy Achievement by Teresa Ukrainetz (Pro-Ed)

- Conversations with Conjunctions by Catherine Harkins May (Pro-Ed)

- I Get It: Building Social Thinking® and Reading Comprehension through Book Chats by Audra Jensen (Think Social Publishing)

- Story Grammar Marker® and Thememaker® from Mindwing Concepts, Inc

- Bringing Words to Life by Isabel Beck, Margaret G McKeown, Linda Kucan

- Storymaking and More Storymaking by Robin Peura-Jones and Carolyn DeBoer (Super Duper)

- The books4all blog at all4mychild.com

Select read-alouds that go beyond the "here and now"

After the museum we go to Central Park. It looks a lot like Dog Mountain.

We see a statue of a dog named Balto. I discover that he ran 674 miles to bring medicine to children. Balto is a hero!

…Giving students experience with using "decontextualized language" in talking about the ideas related to the book (Beck & McKeown, 2001)

"What might you see? hear? feel? smell? taste?"

"Let's talk about all the food trucks. Which one would be your favorite? Why?"

See Sally Discovers New York (Huneck) and the app Toca Life: City ($2.99)

Use stopping points to address story elements and ideas as they are encountered (rather than when the book/apptivity is completed).

(Beck & McKeown, 2001)

"*Horse around* means active play where you move around a lot."

"What do you think it would be like to play tug-of-war with a horse?"

"What are some different ways we can water the crops?"

"Farmers grow wheat **so** we can make bread."

See Sally Goes to the Farm (Huneck) and the app Toca Life: Farm ($2.99)

Sally, meet Harriet.
She loves to horse around.

We play some tug-of-war.

Use open, scaffolded questions with follow-ups, along with constrained questions.

(Beck & McKeown, 2001)

Constrained: "What's Sally doing?"
Open: "What games do dogs like to play?"

See Sally Goes to the Beach (Huneck) and the app Toca Vacation ($2.99). Also consider using open questions in vacation planning activities with apps (use Google Images, Kayak)

The air smells great. just like cat food!

We play in the ocean.
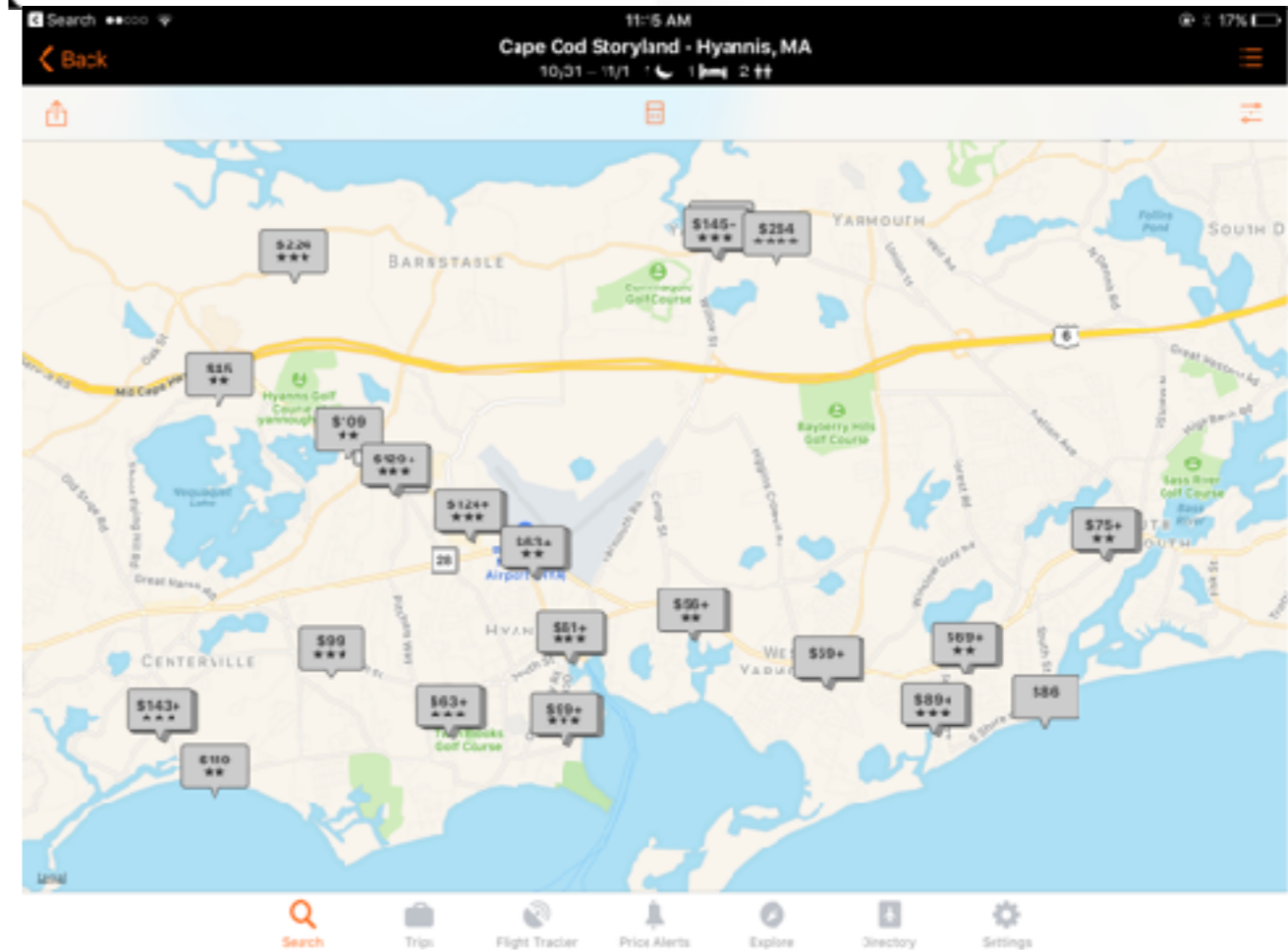
Engaging students in analytic, cognitively challenging talk promotes vocabulary development and story comprehension.

(Dickenson & Smith, 1994)

Cognitively challenging talk:
-**analysis** of characters and events
-**prediction** of coming events
-**text-reader links** (connections between story and real-life experiences)
-talk about **vocabulary**
-**summarizing** extended chunks of text
-**clarifying** comments made about the story

I could become a chef and open a fine restaurant.

It would be a lot of work cooking and cleaning, but washing the dishes would be tasty.

1 Pages Left in Book

Sally Gets a Job (Huneck) provides context for:
-discussion of what a dog might be thinking when left home alone
-prediction of jobs Sally might take
-generation of lists of jobs that students know about
-targeting Tier 2 vocabulary such as *psychic*.
-summarizing the narrative during and after the story
-Pairing with apps that simulate jobs such as Toca Life: Office, see also GCFLearnFree website

Example Book Series and App Pairings

- We Thinkers Volume 2 (Tarshis, Palmer, Hendrix, Winner)

- Speechie characteristics of series: Consistent characters, social cognitive concepts explained, episodic narratives, varying settings, contextual play opportunities as post-activities

- Apps: Use Pic Collage for activities at varying levels of play, apps for role-playing (e.g. Toca Life, Toontastic)

- Vehicles series: I Stink, I'm Brave, I'm Dirty (McMullen)

- Speechie characteristics of series: action sequence narratives, thematic/categorical, related to academic theme of community, verbs, describing by part, function, alphabet and other lists, sound effects

- Apps: ABC Go for vehicle visuals, community simulation apps, make a thought comic for each book in Pic Collage
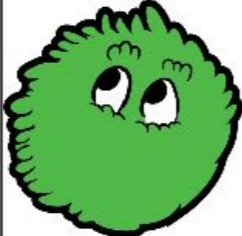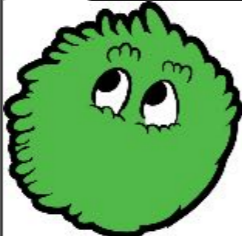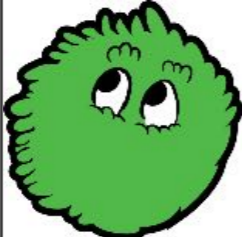
Group Play Plan

(Level _2_ Play Planning Guide)

Story:

Scene:

Jungle scene

	Student Name	Role and Job	Props Needed
	Jesse	Ask about Noah	
	Noah	is lost in the cave -answer questions	
	Ethan	Go to the cave	

Example Book Series and App Pairings

- If you give a… series (Numeroff)

- Speechie characteristics of series: links to setting, **temporal, causal and conditional relationships**, retelling opportunities, social-cognitive lessons

- Apps: Use Pic Collage to do circular retelling, apps for "same but different" dramatic play (e.g. My Playhome School), iESLp App has model Mouse/Cookie "game"

- How Do Dinosaurs… series (Yolen and Teague)

- Speechie characteristics of series: list structure, books tackle specific social situations (schools, playdates, birthday party, chores, taking care of pets, being sick), facial expressions/emotions, "expected and unexpected behaviors" for situations

- Apps: Social Detective apps or CD-ROM, presentation creator for "Social Behavior Mapping"

Example Book Series and App Pairings

- Snow Day, Beach Day… (Lakin/Nash)

- Speechie characteristics of series: complete episode narrative, context of planning (poorly), minimal text to expand narrative in discussion, categories, settings.

- Apps: Make setting collages with Pic Collage, combine with lessons in planning using Ward/Jacobsen strategies, weather contexts, see MarcoPolo Weather

- Lane Smith's Social Studies "series": John, Paul, George and Ben, Madam President.

- Speechie characteristics of series: list structure, exaggeration, humor, "same but different" situations, "hidden rules," situations presented nonverbally

- Apps (and Websites): Ansel & Clair Paul Revere's Ride (free to try/$2.99), iCivics apps and website, bit.ly/ifyouwerepresident (flash)

Example Book Series and App Pairings

- Ada Twist, Scientist and Rosie Revere, Engineer (Beaty/Roberts)

- Speechie characteristics of series: complete episode narratives, sketching to tell a story (see Ukrainetz' Stickwriting, Comic Strip Conversations), part-whole relationships, questions, world vs. social wonder (Social Thinking®), self-talk and accepting failure (self-regulation)

- If I Built a Car, If I Built a House (Van Dusen)

- Speechie characteristics of series: description, if/then, fantastic creations linked to personality traits/likes.

- Apps: Tinybop's science and STEM apps (Human Body, Everything Machine, $2.99, see tinybop.com/handbooks), Questimate

- Scrambled States of America and ….Talent Show (Keller)

- Speechie characteristics of series: complete episode narratives, dialogue, description/characteristics of states

- Apps: Google Earth on iPad or Chrome, Epic Books for Kids has books on each state.

Additional Resources

- YouTube has many picture books in "read aloud" videos

- EPIC! Books for Kids App (Free, sign up for Educator Account) is a great source of e-versions of trade books.

- Book Creator- Create your own picture books. Shares to iBooks for "page-turning" experience.

- Consider researching "Best Picture Books" via web for any year- previous years will be less expensive. Also Blogs about Picture books such as Teach with Picture Books.

- Google or Pinterest search "Picture books about _____."

- Education section of App Store, Blogs about educational apps (see Smart Apps for Kids, Teachers with Apps, Yapp Guru) are great resources of potentially FIVES-friendly apps.

Fun book with "Speechie" aspect

CONTEXT!

FIVES-Friendly app
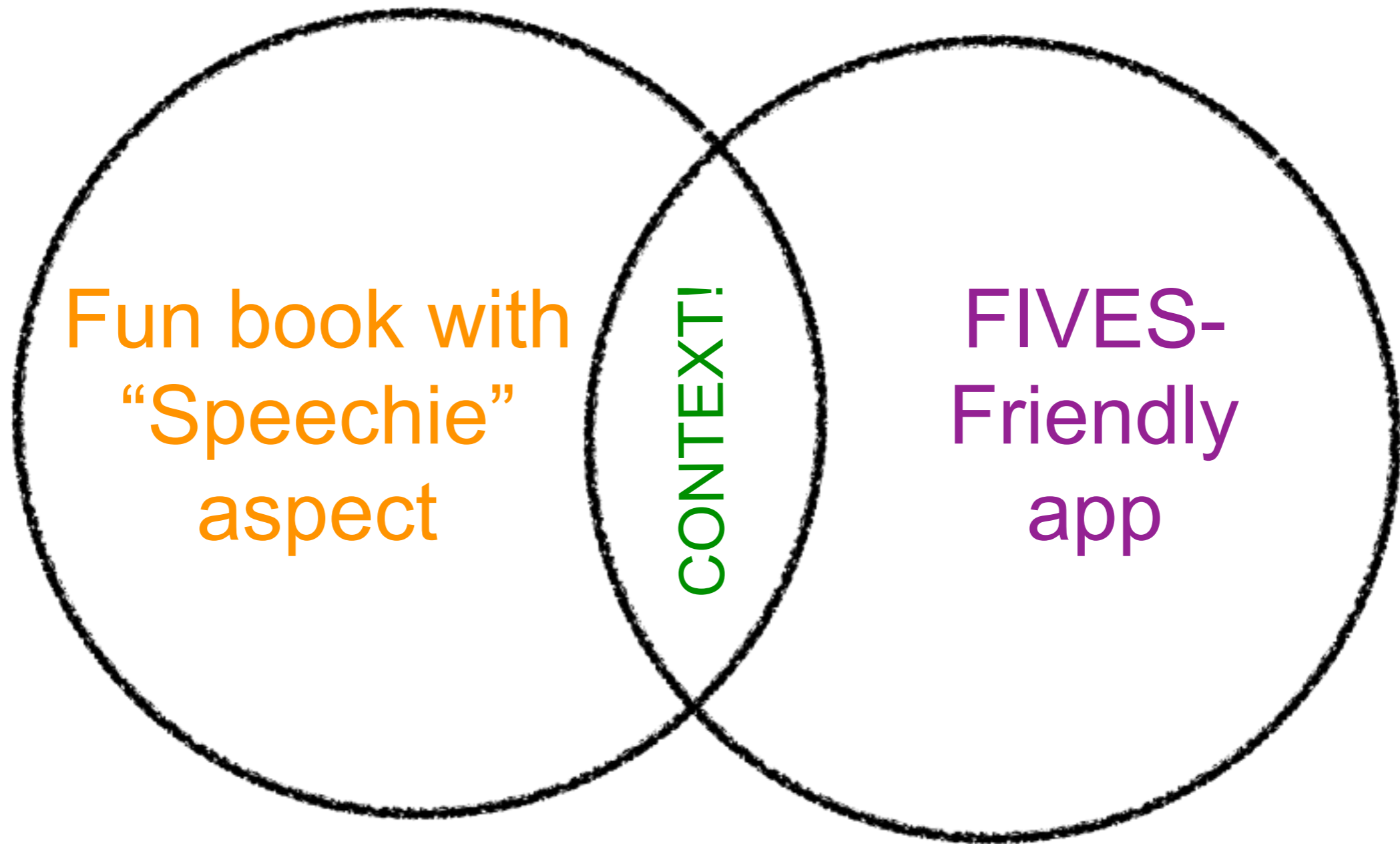
Aligning "old" and "new" visual tools

References

- Alverman, D. (1991). The discussion web: A graphic aid for learning across the curriculum. The Reading Teacher, 45, 92-99.

- Bartelo, D. M. (1984). Getting the picture of reading and writing: A look at the drawings, composing, and oral language of limited English proficiency children. Plymouth, NH: Ply- mouth State College. (ERIC Document Reproduction Service No. ED 245 533).

- Beck, I & McKeown, M. (2001). Text Talk: Capturing the benefits of read-aloud experiences for young children. The Reading Teacher, 55, 10-20

- Beck, I & McKeown, M. (2003). Taking advantage of read alouds to help children make sense of decontextualized language. In A. VanKleek, S. Stahl and E Bauer (Eds.) Storybook Reading. Mahweh, NJ: Erlbaum.

- Davies, P., Shanks, B., & Davies, K. (2004). Improving narrative skills in young children with delayed language development. Educational Review, 56, 271-286.

- Davis, K., & Sweeney, S. (2014). Reading, writing and AAC: Mobile technology strategies for literacy and language development. Perspectives on Augmentative and Alternative Communication, 24, 19-25.

- Ehren, B. J. (2000). Maintaining a Therapeutic Focus and Sharing Responsibility for Student SuccessKeys to In-Classroom Speech-Language Services. Lang Speech Hear Serv Sch, 31(3), 219-229. doi: 10.1044/0161-1461.3103.219.

References

- Dickenson, D.K. & Smith, M.W. (2001). Long-term effects of preschool teachers' book readings on low-income children's vocabulary and story comprehension. Reading Research Quarterly, 29, 105-122.

- Gillam, S. L., Gillam, R. B., Reece, K., Nippold, M., & Schneider, P. (2012). Language Outcomes of Contextualized and Decontextualized Language Intervention: Results of an Early Efficacy Study. Language, Speech & Hearing Services In Schools, 43(3), 276-291. doi: 10.1044/0161-1461(2011/11-0022)

- Hoggan, K.C. & Strong, C.J. (1994). The magic of "once upon a time": narrative teaching strategies. Language, Speech, and Hearing Services in Schools, 25, 76-89.

- Putnam, L. (1991). Dramatizing nonfiction with emerging readers. Language Arts, 68, 463-469.

- Ukrainetz, T. A. (2007). Contextualized language intervention: Scaffolding PreK-12 literacy achievement. Pro-ed.

- Ward, S. & Jacobsen, K. (2014). A Clinical Model for Developing Executive Function Skills. Perspect Lang Learn Educ, 21(2), 72-84. doi: 10.1044/lle21.2.72.

- Westby, C (1990). The role of the speech-language pathologist in whole language. Language, Speech, and Hearing Services in Schools, 21, 228-237.