Final version submitted for publication; published in LSHSS January 2023

Practice-Based Coaching for Speech-Language Pathologists supporting Paraeducators and

Speech-Language Pathology Assistants

Lindsay R. Dennis<sup>1</sup>

Kelly Farquharson<sup>2</sup>

Anne C. Reed<sup>2</sup>

Rebecca Summy<sup>2</sup>

Kimberline G. Clark<sup>1</sup>

Jennifer Westmoreland<sup>2</sup>

## **Conflicts of Interest**

The authors have no financial relationships relevant to this article to disclose.

## **Corresponding Author**

Lindsay R. Dennis Florida State University 1114 W. Call St., STB 2208D Tallahassee, FL 32306 <u>Irdennis@fsu.edu</u> 850-645-0413 ORCID: 0000-0003-1509-7573

## Affiliations:

<sup>1</sup>School of Teacher Education, Florida State University, Tallahassee, FL

<sup>2</sup>School of Communication Science and Disorders, Florida State University, Tallahassee, FL

#### Abstract

Purpose: This tutorial is designed for speech-language pathologists who supervise speechlanguage pathology assistants (SLP-As) and/ or paraeducators. SLP-As and paraeducators often support young children with disabilities within early childhood settings, but do not always have access to professional development to learn and/or enhance their skill set. Practice-based coaching (PBC) provides a collaborative framework under which professionals can effectively implement instructional strategies with fidelity to support preschool children with language delays. Conclusion: In this manuscript, we will share the components of PBC including implementation materials that can be immediately utilized by SLPs. We will also share methods for embedding effective vocabulary instruction into SBR sessions to ensure early literacy instruction is more accessible to learners with varying educational needs.

1	Morgan has been a speech-language pathologist (SLP) at Greensboro Early Childhood
2	Center for 10 years, working with children aged 3-5 who attend the center and have speech-
3	language goals outlined in their Individualized Education Plan (IEP). She is always on the
4	lookout for continuing education courses, particularly through the American Speech-Language-
5	Hearing Association (ASHA), and recently participated in continuing education related to
6	supervision of, and collaboration with, other professionals. Miss Fairbanks, the school
7	administrator, recognizes the support needs of all her teachers and particularly those who have
8	children with disabilities included in their classrooms. Miss Fairbanks is aware of Morgan's
9	recent continuing education course and approaches her with a request to provide training for a
10	newly hired speech-language pathology assistant (SLP-A), Elliot.
11	The children with disabilities attending Greensboro have a diverse range of needs,
12	specifically in the area of language and literacy development. Lead teachers utilize a variety of
13	evidence-based (EB) practices, but often find it difficult to provide more intensive and
14	individualized supports to children. One routine, shared book reading (SBR), has been identified
15	by the teachers as a particular area of needed support. Miss Fairbanks takes the teachers desire
16	for support of shared book reading to Morgan, asking her to train Elliot in evidence-based
17	strategies specific to language and literacy development to be delivered during shared book
18	reading routines within the classroom. Morgan agrees with Miss Fairbanks that this opportunity
19	will allow Morgan to use her newly acquired expertise in collaboration and supervision.
20	Introduction
21	Speech-language pathologists (SLPs) have a unique and highly specialized skill set, which
22	make them essential members of educational teams (ASHA, 2010). In school-based settings, their
23	roles and responsibilities are clearly defined by the American Speech Language Hearing

24	Association (ASHA, 2010). Germane to the current tutorial are SLPs' responsibilities related to
25	supervision, particularly of speech-language pathology assistants (SLP-As) and/ or paraeducators.
26	Although the 2020 ASHA Standards include a requirement for professional development related
27	to supervision (ASHA, 2020, Standard V-E), this requirement is limited to a one-time, two-hour
28	continuing education session. As such, SLPs who have a supervisory role in their school may
29	need to implement a more structured approach to supporting SLP-As and paraeducators. Practice-
30	based coaching (PBC) offers such a framework. PBC is a form of professional development that
31	is considered essential for supporting implementation of evidence-based practices (Artman-
32	Meeker et al., 2015). PBC is an individualized coaching model comprising three components: (a)
33	shared goals and action planning, (b) focused observation, and (c) reflection and feedback
34	(Snyder et al., 2015). In this tutorial, we present PBC as a means for busy school-based SLPs to
35	structure their support of the SLP-As and paraeducators they supervise. There are two primary
36	purposes for implementing PBC: 1) to improve the quality of services provided by SLP-As and
37	paraeducators, and 2) to effectively delegate tasks to SLP-As and paraeducators in ways that
38	ensure practices are evidence-based. We use shared book reading strategies as an anchor
39	throughout to provide explicit and concrete examples; however, we intend for the framework of
40	PBC to be used broadly in various aspects of the scope of speech-language pathology.

# 41 Roles and Responsibilities in School-Based Settings

As previously mentioned, school-based SLPs have roles and responsibilities outlined by
ASHA. These are organized into four specific categories: critical roles, range of responsibilities,
collaboration, and leadership (see ASHA, 2010; Giess et al., 2012). Within the collaboration
category, ASHA explicitly outlines that SLPs are responsible for working alongside other
educational professionals to ensure that students' needs are adequately met. This includes other

school professionals, universities, community partners, families, and students. Within the
leadership category, ASHA states that SLPs serve in an important capacity with respect to
supervising and mentoring new professionals, including students, clinical fellows, and newly
certified clinicians. Importantly, for the present tutorial, this includes speech-language pathology
assistants (SLP-As) and paraeducators.

52 There is substantial overlap in the responsibilities between SLP-As and paraeducators. 53 Paraeducators play a vital role in the instruction of students with disabilities, with more special 54 education paraeducators employed in preschool through high school settings than special 55 education teachers (U.S. Department of Education, 2019). Paraeducators are defined as 56 employees who provide instructional support, assist with classroom management, participate in 57 parental involvement activities, and instruct students under the supervision of a teacher (U.S. 58 Department of Education, 2019, p. 37), or SLP. Given the importance of paraeducators in the 59 education of students with disabilities, adequate preparation and training are critical for students 60 to achieve the best outcomes (Brock & Carter, 2013). Although the Individuals with Disabilities 61 Education Improvement Act (IDEA, 2004) mandates that paraeducators be appropriately trained 62 and supervised, the requirements for appropriate training vary by state and are often unclear (Hall 63 & Odom, 2019). Only recently has there been a requirement to earn continuing education hours 64 related to supervision. In the 2020 ASHA Standards (ASHA, 2020), SLPs must attain at least two 65 hours of continuing education related to supervision or clinical instruction. This standard (2020 66 V-E) pertains to supervision of SLP graduate students, clinical fellows (CFs), and SLP-As. There are several issues with this standard. First, it is a one-time requirement; SLPs are not required to 67 68 continually update their knowledge of best practices for supervision. Second, this standard only 69 applies to currently practicing SLPs. That is - there is no requirement for graduate coursework

related to supervision, even though SLPs report dedicating time each week to supervising students
and/ or clinical fellows (ASHA, 2020a). Finally, 45% of surveyed SLPs report feeling either
somewhat comfortable, slightly comfortable, or not comfortable at all with supervising SLP-As
(ASHA, 2020b). This is quite worrisome considering that SLPs are required to supervise SLP-As
and paraeducators, despite their level of comfort with doing so. In the present tutorial, we suggest
that SLPs who may feel limited in their ability to supervise, use practice-based coaching (PBC) as
a framework for continued professional development, beyond the required two hours.

77 SLPs, SLP-As, and paraeducators all require professional development (PD) to ensure the 78 implementation of best practices (note, however, that the type and amount of required PD varies 79 substantially by state). There are several approaches to engaging in PD in education, including 80 workshops, conferences, degree programs, peer observation, professional networks, research, 81 coaching, online learning modules, and professional literature (Broad & Evans, 2006; Snell et al., 82 2019). Research on PD aligned with adult learning principles suggest learner-centered models of 83 PD that are sustained over longer periods of time include practice opportunities in authentic 84 contexts, as well as incorporating peer coaching as a means for effecting change (McLeskey, 2011). Similarly, the use of video analysis, or the viewing of one's own video for the purpose of 85 86 improvement, also has demonstrated efficacy for improving a variety of instructional and 87 behavioral skills (Morin et al., 2019); however, most of the research on effective PD focuses on 88 improvement of teachers' skills (e.g., McLeskey, 2011), and less is known about which 89 approaches result in paraeducators applying knowledge about effective instructional techniques 90 with their students with disabilities. Furthermore, although there is support for sustained models 91 of PD (Bertuccio et al., 2019), these models are often not implemented with paraeducators 92 (Sobeck & Robertson, 2019). Finally, the content of PD programs should be aligned with

guidance by professional organizations on the preparation of paraeducators (see Council for
Exceptional Children, 2015). By including relatable examples based on best practices, PD
providers increase the likelihood that paraeducators will apply what they learn when working with

96 their students.

97 Taken together, SLPs have a myriad of roles and responsibilities within school-based 98 settings (e.g., ASHA, 2010) and that many SLPs report high levels of job-related stress and/or 99 burnout (e.g., Marante & Farquharson, 2021). Supervision of students, clinical fellows, SLP-As, 100 and paraeducators is one of many responsibilities. Importantly, only 5% of school-based SLPs 101 report receiving any form of salary supplement for supervising students, SLP-As, or 102 paraeducators (ASHA, 2020). Additionally, there is a documented lack of required PD related to 103 supervision. SLPs can share their expertise with their supervisees in a way that helps the 104 supervisees become more autonomous and independent in their roles. Doing so helps SLPs to 105 actually delegate aspects of their workload to alleviate job stress. This approach also ensures that 106 SLP-As and paraeducators are implementing EB practices, which ultimately will improve student 107 outcomes. This is particularly true as nearly 80% of SLP-As report that their roles include daily 108 documentation of student performance (ASHA, 2021). To these ends, this tutorial will provide 109 guidance for supervising SLPs within the context of practice-based coaching (PBC).

110

### **Practice Based Coaching (PBC)**

Within the early childhood literature, coaches are typically professionals with expertise in a specific content area (Landry et al., 2009; Neuman & Cunningham, 2009). SLPs frequently fulfill a consultative role to early child educators by assisting them in the planning and implementation of EB strategies for enhancing the language and literacy outcomes of young children (Justice & Kaderavek, 2004). This unique skill set positions SLPs to serve not only as

collaborators alongside paraeducators and SLP-As, but also in the role of a coach. Note that we
are moving to the term "coach" to refer to the SLP's role in this dynamic (Snyder et al., 2015).
This does not change the fact that SLPs may formally be called supervisors in their settings. For
our purposes, we will use "coach" henceforth, but "supervisor" may be the formal term used in
particular settings. As mentioned above, PBC has three components: (a) shared goals and action
planning, (b) focused observation, and (c) reflection and feedback (Snyder et al., 2015). See Table
1 for components and associated actions (Dennis et al., 2021).

123 During the shared-goals-and action planning component of the PBC process, the coach 124 and coachee work together to create goals, actionable steps toward meeting those goals, and 125 anticipated supports needed by the coachee (Snyder et al., 2015). When creating goals, a needs 126 assessment may be done in which the coach observes the target behaviors of the coachee to gauge 127 a starting point for a reasonable goal and performance criteria. Goals should be measurable, 128 observable, and explicit (Snyder et al., 2015) while also considering the coachee's strengths, 129 needs, and preferences. As new goals are written or existing goals modified, support may also 130 need to be adjusted. Initial training may need to occur when a new skill or process is being 131 learned by the coachee. For example, the coach may provide direct instruction on the behaviors to 132 be implemented, model the procedures while the coachee observes, and role-play with the 133 coachee while providing feedback for both correct and incorrect implementation examples 134 (Lerman et al., 2019).

As outlined by Snyder and colleagues (2015), the term observation refers to processes associated with gathering information about fidelity of practice implementation and is guided by the action plan and associated goals. Information gathered during the focused observation should be specific to the goal outlined in the action plan rather than a general observation. During the

focused observation, the coach takes descriptive notes about the educator's action plan goal related to implementation of targeted strategies. Figure 1 provides a sample data collection form to be used alongside the educator's worksheet (see Dennis et al., 2021). This will allow the coach to collect data in real time or via video recording as it serves as an easy reference for the strategies being implemented.

144 The reflection component involves coach and coachee reviewing the action plan as well as 145 data gathered about practice implementation to identify successes, challenges, motivators, or next 146 steps needed to improve or refine the teaching practice (Snyder et al., 2015). Within the PBC 147 coaching model, feedback provided is performance based, or specific to the individual's behavior. 148 Supportive feedback is used to identify and provide positive aspects of the teaching practice, and 149 connects information from the observation with the goals and associated action plan to help 150 illustrate progress. Constructive feedback is used to help identify opportunities to improve or 151 refine teaching practices, is specific, and outline steps for strengthening fidelity of practice 152 implementation. Instructional statements can be used to inform or teach about how to enhance 153 future implementation of the targeted teaching practices. Clarifying and probing questions can be 154 used to, respectively, confirm understanding or actions and encourage the coachee to share 155 personal opinions, perspectives, or feelings related to the target practices (Shannon et al., 2020). 156 Finally, reflection and feedback strategies can include review of data, role-play, problem-solving 157 conversations, and modeling of practices (Snyder et al., 2015). 158 Establishing a collaborative partnership that creates a context for shared decision making 159 is essential to the success of PBC. In PBC, teaching practices are derived from EBPs or

160 recommended practices that, when implemented with fidelity, have been shown through research

161 to be positively associated with child engagement and learning (Snyder et al., 2015). Although

162

163

there are myriad ways in which PBC can be used to support the relationship between SLPs and SLP-As/ paraeducators, we will use shared book reading for an illustrative example.

164

### Importance of Early Literacy & Language Development

165 SLPs play a crucial role in the development of literacy and language. Therefore, SLP-As 166 and paraeducators are often tasked with engaging in literacy- and/or language-based activities for 167 the children on their caseloads. Reading comprehension is a necessary skill for classroom success. 168 The Simple View of Reading states that reading comprehension is the product of word reading 169 and language comprehension (Gough & Tunmer, 1986; Hoover & Gough, 1990). While one must 170 typically wait for direct instruction to "crack the code" of sound-symbol correspondence, which 171 leads to word reading, language comprehension implicitly occurs early in development (Fernald 172 et al., 2013). Future reading ability is mediated by a child's language ability. Children who exhibit 173 difficulty in language comprehension and reading in kindergarten continue to have reading-based 174 difficulty in subsequent grades (Catts et al., 2002, 2003, 2006). In a longitudinal study spanning 175 15 years, Suggate et al. (2018) found strong predictive links between language and reading scores. 176 Children at risk for language disabilities in preschool have an increased risk for future reading 177 disabilities (Adlof & Hogan, 2018; Catts, 1993; Hayiou-Thomas et al., 2010; Snowling et al., 178 2000; Suggate et al., 2018).

Difficulty with language is often noted by parents and caregivers long before a child begins kindergarten (Thal et al., 1999) and parents can serve as reliable informants (Mancilla-Martinez et al., 2016). SLPs are responsible for meeting the needs of children with reading difficulty (ASHA, 2010); therefore, it is also within the scope of practice for SLP-As and paraeducators. Through PBC, SLPs can fill knowledge gaps for both SLP-As and paraeducators as well as help them provide high quality, explicit instruction in the areas of language and literacy 185 (i.e., vocabulary) to assist children in developing the necessary foundational skills that will guide186 future academic success.

187In their first team meeting, Morgan and Elliot discuss the needs of the children within the188preschool classrooms who are on Morgan's caseload and identify one in need of additional189language/literacy supports. Jacob is a 3-year-old diagnosed with a developmental delay and190receives speech-language services for expressive language development and articulation. Next,191they establish a schedule for SBR sessions. Morgan explains to Elliot that she will observe the192book reading sessions to provide feedback when they meet.

193 Shared Book Reading (SBR)

194 One important support for early language and literacy development for preschool age 195 children is shared book reading (SBR). Although it is common practice to read aloud to children, 196 SBR is explicitly referring to reading aloud to children while using behaviors (e.g., asking 197 questions, commenting about the story, expanding on the child's utterance) that are meant to 198 promote interaction between the adult and child, as well as support the child's language and 199 literacy development (National Early Literacy Panel, 2008; U.S. Department of Education, 2015). 200 SBR is an umbrella term that is often used interchangeably with interactive shared book reading; 201 henceforth we will exclusively use SBR.

A recent longitudinal examination of the association of SBR and children's later academic achievement indicated that SBR was directly and indirectly associated with academic achievement through receptive vocabulary and early academic skills (Shanahan et al., 2018). Additionally, meta-analyses examining the impact on improving word learning from SBR indicate the interactions between adults and children during SBR significantly influence the

number of new words children learn from SBR (Flack et al., 2018; Requa et al., 2021; Wasik etal., 2016).

209 Reading books with young children is a common activity in many household and school 210 routines. Simply reading stories out loud positively impacts vocabulary development (Penno et 211 al., 2002; Requa, et al., 2021; Sénéchal, 1997). However, SBR is an approach that embeds 212 structured techniques to systematically and purposefully improve vocabulary development. For 213 children with language delays, this purposeful approach is necessary, as they may not learn words 214 as incidentally as their typically-developing peers (Penno et al., 2002; Sonbul & Schmitt, 2010). 215 Indeed, greater effects are noted when parents, caregivers, teachers, and/or staff are given the 216 opportunity to supplement with explicit word-teaching techniques (McBride-Chang, 2012). 217 Notably, teachers are not the only individuals who can implement techniques while reading; 218 rather, parents, paraeducators, and/or SLP-As can engage in SBR to enhance vocabulary 219 development (Requa et al., 2021; Sim et al., 2014). In fact, Noble and colleagues (2020) strongly 220 suggest encouraging caregivers and practitioners to read with children in the early years, and 221 many SBR interventions have been created to support language development and school 222 readiness. They note the purpose of SBR interventions is to train caregivers and practitioners to 223 read with the child using techniques to improve vocabulary development. Shared-book reading 224 uses techniques that encourage the adult to be responsive to the child and to expose the child to 225 language that is slightly more advanced than their current language level (Noble et al., 2020). 226 Adult-child storybook reading interactions provide highly contextualized exposures to novel 227 words in a routine that is authentic, familiar, and often motivating to young children (Requa et al., 228 2021; Roth, 2002).

229 Vocabulary-focused SBR is a central component within most intentional vocabulary 230 programs (see Wasik et al., 2016). For many children, incidental learning happens through mere 231 exposure to a word; in contrast, direct vocabulary instruction includes asking children to attend to 232 a word's explanation and remember its meaning. Although children do learn words incidentally 233 from quality language input, directly teaching vocabulary improves recall of words and deepens 234 understanding of the word's meaning (e.g., Penno et al., 2002; Sonbul & Schmitt, 2010). 235 Educators should plan to read three or four times a week and teach 2-3 words per reading, 236 suggestions that are consistent with experts in the field (e.g., Zucker et al., 2021). 237 **Dialogic Reading** 238 As mentioned previously, SBR is an umbrella term referring to the broad practice of 239 reading aloud to children with the use of specific techniques. Dialogic reading (DR) is a type of 240 SBR, which employs a systematic framework for adult interactive behaviors which encourages 241 children to become more active participants in the reading (Towson et al., 2017; Whitehurst et al., 242 1998; US Department of Education, 2010). The effectiveness of DR in improving oral language 243 skills has been shown for both typically developing children (Arnold et al., 1994; Whitehurst et 244 al., 1998) and children with disabilities, including those with language impairments (Hargrave & 245 Senechal, 2000; Towson et al., 2016). The adult's role in DR is a sequential, 4-step process 246 represented by the acronym PEER, which stands for Prompt, Evaluate, Expand, and Repeat. First, 247 the adult *prompts* the child using one of five strategies to elicit a response. These prompting 248 strategies are represented by an additional acronym, CROWD and include completion, recall,

249 open-ended questions, wh-questions, and distancing. These prompts encourage open-ended, rather

than yes/no questions. The next step is to *evaluate* the child's response for accuracy, followed by

251 *expanding* on the child's response by rephrasing or adding information to it. Finally, the adult

asks the child to *repeat* the expansion. The PEER sequence is explicitly used to refer to DR; thatis, it is used within the context of shared book reading.

254 The extra-textual talk provided by the adult during DR reading has been significantly 255 associated with improvements in oral language skills (van Kleeck et al., 2006; van Kleeck, 2008). 256 Specifically, asking open-ended questions, both literal and inferential, and evaluating a child's 257 response have been found to increase children's word learning (Ard & Beverly, 2004; Blewitt et 258 al., 2009; Trivette et al, 2012) and provides opportunities for children to practice and engage with 259 language (Walsh & Hodge, 2010; Zucker et al., 2010). Additionally, commenting on or 260 expanding the child's response increases the child's conversational acts, allows the child to 261 respond in a variety of ways, and increases the child's attention during reading (Fletcher et al., 262 2008; Hockenberger et al., 1999). Finally, repetitions have been found to elicit a child response 263 and is associated with greater word learning (O'Fallon et al., 2020). Overall, implementing the 264 PEER sequence in its entirety provides the child with models of language targets, gives the child 265 multiple opportunities to engage with the text and target, and increases the child's linguistic 266 output and engagement (Morgan & Meier, 2008).

267 Although DR is an evidence-based intervention for improving oral language skills, it often 268 needs to be scaffolded to meet the needs of educators. For example, research has shown that 269 asking open-ended questions is more beneficial in promoting oral language skills; however, this 270 skill does not come naturally for many educators (Deshmukh et al., 2019). Therefore, effective 271 implementation requires planning, and the intended outcome for the child needs to be considered 272 beforehand (Walsh & Hodge, 2018). One way to improve implementation of DR strategies is pre-273 planning when and where to use the PEER sequence. Utilizing scripts is an evidence-based 274 scaffold that has been associated with improved language instruction (Barnes & Dickinson, 2017;

275	van Kleeck, 2006). Scripts can be personalized to meet the needs of specific educators, detail the
276	specific instruction, and are used to ensure the intervention is natural and effective (Barnett et al.,
277	2007). Several studies have utilized scripts to improve treatment fidelity and make the
278	intervention accessible for all educators to implement (Desmarais et al., 2013; Goldstein et al.,
279	2016; van Kleeck et al., 2006).
280	<b>PBC to Support Strategy Implementation</b>
281	The PBC framework offers practitioners (e.g., SLP with paraeducators and SLP-As) the
282	opportunity to collaborate to improve language and literacy outcomes for preschool children with
283	language delays. The PBC framework also successfully supports implementation of EB strategies
284	during SBR sessions, below the strategies specifically addressed in this tutorial are outlined.
285	The first strategy, question/evaluate, includes three types of questions: labeling (elicit
286	target word), definition (elicit definition of target word), and inference (elicit a response requiring
287	integration of information from the book with prior knowledge or experiences). Responses to
288	each question are evaluated as either correct, the adult confirms and repeats (e.g., Child says,
289	"wolf," Teacher says, "That's right, it is a wolf."), or incorrect, the adult provides a direct model
290	(e.g., Child says, "I don't know," Teacher says, "It is a wolf."). The second strategy, expansions,
291	is defined as adding $1 - 2$ more words to the child's response. The third strategy, <i>repeat</i> , is
292	defined as prompting the child to repeat the adult's expansion.
293	We describe how strategy implementation is supported through each step of the PBC
294	process through the vignettes provided in the following sections.
295	Step 1: Shared Goals & Action Planning
296	To begin, Morgan conducts a needs assessment in which she observes two sessions of
297	Elliot reading with Jacob, and takes notes regarding the behaviors she believes can be improved

upon. The primary need identified is specific instructional strategies to encourage and develop
language. During the initial coaching session with Elliot, Morgan and Elliot set a goal related to
asking questions during SBR sessions that includes preselected vocabulary targeting children's
language and literacy needs. As coach, Morgan leads the session while ensuring Elliot contributes
their ideas to the goal and action plan for the week. They collaborate to identify specific supports
Elliot will each need from Morgan to be successful in meeting their individualized goal. See
Table 2 for a sample action plan.

305 After completing the action plans, Morgan shares specific strategies and techniques for 306 teaching vocabulary that will help Elliot support Jacob's language and literacy needs during SBR. 307 First, she shares four preselected target vocabulary words that are likely unknown to the child and 308 are written in text or depicted in an illustration of the book, as well as corresponding child-309 friendly definitions. Then, using a sample storybook, Morgan models the first part of the 310 instructional sequence. She states the target word and definition that will be found on the page, 311 reads the page, then asks the preplanned question about the target vocabulary word. Elliot plays 312 the role of the child to respond to the question, while Morgan evaluates their answers. Together, 313 they read through the sample storybook and take turns role-playing while labeling and defining 314 the vocabulary word on each page, asking the question prompts, and evaluating responses. Once 315 Elliot is confident in the strategies, they select a book to read, and together with Morgan, 316 completes an educator worksheet (see Figure 1) following the same instructional sequence. 317 Morgan refers Elliot back to their respective action plan to review their goal. To end the coaching 318 session, Morgan schedules three focused observations of Elliot reading to Jacob. Initially, Morgan 319 chooses to observe Elliot three times to ensure Elliot is implementing and maintaining all SBR

320 strategies. Morgan hopes to reduce the number of observations as Elliot becomes more

321 comfortable with the strategies and implements them with fidelity.

### 322 Step 2: Focused Observation

323 Morgan observes and records data during three of Elliot's SBR sessions over the course of 324 the week. Data recorded include anecdotal notes (i.e., qualitative data) as well as a frequency 325 count (i.e., quantitative data) for each opportunity to ask a question (i.e., label, definition, 326 inference) and provide the corresponding evaluation for correct or incorrect response. Elliot has 327 twelve opportunities to ask a question and evaluate the response. Both must occur for the 328 opportunity to be scored as correct. Morgan creates simple line graphs to visually depict Elliot's 329 behavior. Morgan inserts the graph, summary of the data, and anecdotal notes into the 330 performance feedback form she created (see Figure 2). She will address these observations and 331 collaborate with Elliot during the next coaching session to evaluate progress toward their 332 respective goal. Figure 2 333 **Step 3: Reflection and Feedback** 334 During the next coaching sessions, Morgan reviews the performance feedback sheet with

Elliot while providing both supportive and constructive feedback. Morgan shares her anecdotal notes and data collected with Elliot to determine if their respective goal need to be updated or remain the same. To end the coaching session, Morgan checks for understanding by asking Elliot to share their questions, concerns, and feelings.

339

#### Conclusion

Taken together, the literature reviewed above, paired with the vignettes depict a way in
 which SLPs can use PBC to support SLP-As and paraeducators who they are assigned to

342 supervise. For SLPs new to the idea of PBC, this framework may seem daunting or

343 overwhelming. Additionally, there may be two distinct challenges to the implementation of PBC. 344 First, this approach requires support from administration (e.g., building principals, special 345 education directors). PBC requires continued and direct contact between the SLP and the SLP-As/ 346 paraeducators, which may take up time that was previously used for other assigned tasks (e.g., 347 IEP meetings, assessments, etc.). Second, many SLPs have itinerant schedules, meaning that they 348 are assigned to multiple school buildings, each of which they report to every week. In this 349 scenario, there may be several SLP-As and/ or paraeducators at each school. For those SLPs, we 350 recommend starting this process small, with 1-2 SLP-As/ paraeducators at one of the assigned 351 schools. Once the SLP is comfortable with this approach, there can be a team discussion about 352 how it might be expanded to support the SLP-As and paraeducators in all buildings. However, it 353 is important to keep in mind two primary purposes for implementing PBC: 1) to improve the 354 quality of services provided by SLP-As and paraeducators, and 2) to effectively delegate tasks to 355 SLP-As and paraeducators in ways that ensure practices are evidence-based. 356 Although the focus here was on the use of PBC to help SLP-As and paraeducators learn 357 and use shared book reading strategies, we encourage SLPs to consider using PBC to support the 358 professionals they supervise in a myriad of ways. As a function of their job requirements, SLP-As 359 and paraeducators are likely to spend more direct time with children who have language delays 360 compared to the supervising educators or SLPs. As such, these important members of the 361 educational team should be supported so that their interaction with students includes more 362 evidence-based practices. It is our hope that using PBC helps SLPs to work towards reducing 363 burnout, job stress, and workload overwhelm. Over time, the use of a PBC model will have 364 positive outcomes not just for the SLP and paraeducator coaching dyad, but also for the children 365 whom they serve. We encourage SLPs to utilize the following resources to learn more about PBC:

- 366 (a) Head Start Early Childhood Learning & Knowledge Center
- 367 (https://eclkc.ohs.acf.hhs.gov/professional-development/article/practice-based-coaching-pbc), (b)
- 368 The National Center for Pyramid Model Innovations (NCPMI;
- 369 <u>https://challengingbehavior.cbcs.usf.edu/Implementation/coach.html</u>), and © Essentials of
- 370 Practice Based-Coaching (https://products.brookespublishing.com/Essentials-of-Practice-Based-
- 371 <u>Coaching-P1288.aspx</u>).

### Acknowledgments

We are grateful to the team of research assistants who have helped with our larger practice-based coaching project (Training Assistants in Language Elicitation Strategies; TALES): Alanna Alfonzo, Izzy Hoogland, Hailey Sheppard, Georgi Taylor, and Michael Walsh. TALES was funded by a Multidisciplinary Support grant from the Florida State University Council on Research and Creativity (PI: Dennis, Co-I: Farquharson). Reed and Summy are doctoral students funded by the Institute of Education Sciences, U.S. Department of Education, through Grant R305B200020 to the Florida Center for Reading Research at Florida State University. This grant paid for their time on this project. The opinions expressed are those of the authors and do not represent views of the Institute or the U.S. Department of Education.

#### References

- Adlof, S. M., & Hogan, T. P. (2018). Understanding dyslexia in the context of developmental language disorders. *Language, Speech, and Hearing Services in Schools*, 49(4), 762–773. https://doi.org/10.1044/2018 lshss-dyslc-18-0049
- American Speech-Language-Hearing Association [ASHA]. (2010). *Roles and responsibilities of speech-language pathologists in schools* [Professional Issues Statement]. Available from <u>www.asha.org/policy/</u>.
- ASHA (2019). Speech-language pathology assistant scope of practice [Scope of Practice]. Available from <u>www.asha.org/policy/</u>.
- ASHA (2020a). Schools Survey Report: SLP Caseload Characteristics Trends, 2004-2020. www.asha.org
- ASHA. (2020b). 2020 Schools survey. Survey summary report: Numbers and types of responses, SLPs. <u>www.asha.org</u>.
- ASHA (2021). 2021 ASHA Audiology and Speech-Language Pathology Assistants Survey Results. <u>www.asha.org</u>
- Ard, L. M., & Beverly, B. L. (2004). Preschool word learning during joint book reading: Effect of adult questions and comments. *Communication Disorders Quarterly*, 26(1), 17–28. <u>https://doi.org/10.1177/15257401040260010101</u>

Artman-Meeker, K., Fettig, A., Barton, E., Penney, A., & Zeng, S. (2015). Applying an evidence-based framework to the early childhood coaching literature. *Topics in Early Childhood Special Education*, 35, 183–196. <u>https://doi.org/10.1177/0271121415595550</u>

Arnold, D. H., Lonigan, C. J., Whitehurst, G. J., & Epstein, J. N. (1994). Accelerating language development through picture-book reading: Replication and extension to a videotape

training format. Journal of Educational Psychology, 86, 235-243.

https://doi.org/10.1037/0022-0663.86.2.235

- Barnes, E. M., & Dickinson, D. K. (2017). The impact of teachers' commenting strategies on children's vocabulary growth. *Exceptionality*, 25(3), 186–206. <u>http://dx.doi.org/10.1080/09362835.2016.1196447</u>
- Barnett, D., Bauer, A., Bell, S., Elliott, N., Haski, H., Barkley, E., Baker, D., & Mackiewicz, K. (2007). Preschool intervention scripts: Lessons from 20 years of research and practice. *The Journal of Speech and Language Pathology—Applied Behavior Analysis, 2*(2), 158. http://dx.doi.org/10.1037/h0100216
- Blewitt, P., Rump, K. M., Shealy, S. E., & Cook, S. A. (2009). Shared book reading: when and how questions affect young children's word learning. *Journal of Educational Psychology*, *101*(2), 294–304. http://dx.doi.org/10.1037/a0013844
- Boyle, S. A., McNaughton, D., Chapin, S.E. (2019). Effects of Shared Reading on the Early Language and Literacy Skills of Children with Autism Spectrum Disorders: A Systematic Review. Focus on Autism and Other Developmental Disabilities, 34(4), 205–214.
- Catts, H. W., Fey, M. E., Tomblin, J. B., & Zhang, X. (2002). A Longitudinal Investigation of Reading Outcomes in Children with Language Impairments. *Journal of Speech, Language, and Hearing Research*, 45(6), 1142-57.
- Catts, H. W., Hogan, T. P., & Fey, M. E. (2003). Subgrouping poor readers on the basis of individual differences in reading-related abilities. *Journal of Learning Disabilities*, 36(2), 151–164. <u>https://doi.org/10.1177/002221940303600208</u>

- Catts, H. W., Adlof, S. M., & Weismer, S. E. (2006). Language deficits in poor comprehenders:
  A case for the simple view of reading. *Journal of Speech, Language, and Hearing Research*, 49(2), 278–293. https://doi.org/10.1044/1092-4388(2006/023)
- Connor, C. M., Alberto, P. A., Compton, D. L., & O'Connor, R. E. (2014). Improving Reading Outcomes for Students with or at Risk for Reading Disabilities: A Synthesis of the Contributions from the Institute of Education Sciences Research Centers. NCSER 2014-3000. *National Center for Special Education Research*. Retrieved from https://ies.ed.gov/ncser/pubs.
- Council for Clinical Certification in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association. (2018). 2020 Standards for the Certificate of Clinical Competence in Speech-Language Pathology. Retrieved from www.asha.org/certification/2020-SLP-Certification-Standards.
- Council for Exceptional Children (CEC, 2015). What every special educator must know: Professional ethics and standards. Arlington, VA: CEC.

https://exceptionalchildren.org/standards/paraeducator-preparation-guidelines

Dennis, L. R., Weatherly, J., Robbins, A., & Wade, T. (2021). Practice-based coaching to support paraeducator implementation of shared book reading strategies in preschool. *Teaching Exceptional Children*, 53(6), 443-440.

https://doi.org/10.1177%2F0040059920976675

Deshmukh, R.S., Zucker, T.A., Tambyraja, S R., Pentimonti, J.M., Bowles, R.P., & Justice, L.
M. (2019). Teachers' use of questions during shared book reading: Relations to child responses. *Early Childhood Research Quarterly*, 49(4), 59–68.
<a href="https://doi.org/10.1016/j.ecresq.2019.05.006">https://doi.org/10.1016/j.ecresq.2019.05.006</a>.

- Desmarais, C., Nadeau, L., Trudeau, N., Filiatrault-Veilleux, P., & Maxes-Fournier, C. (2013).
   Intervention for improving comprehension in 4–6year old children with specific language impairment: Practicing inferencing is a good thing. *Clinical Linguistics & Phonetics*, 27(6–7), 540–552. https://doi.org/10.3109/02699206
- Fletcher, K. L., Cross, J. R., Tanney, A. L., Schneider, M., & Finch, W. H. (2008). Predicting language development in children at risk: The effects of quality and frequency of caregiver reading. *Early Education and Development*, 19(1), 89-111. https://doi.org/10.1080/10409280701839106
- Fernald, A., Marchman, V. A., & Weisleder, A. (2013). SES differences in language processing skill and vocabulary are evident at 18 months. *Developmental science*, *16*(2), 234-248.
- Giess, S., Farquharson, K., Means, J. W., & Fitzgerald, M. D. (2012). Preparing graduate students to carry out their roles and responsibilities in a school-based setting. *Perspectives on Issues in Higher Education*, 15(1), 11-15.
- Goldstein, H., Kelley, E. S., Greenwood, C. R., McCune, L., Carta, J., Atwater, J., Guerrero, G., McCarthy, T., Schneider, N., & Spencer, T. (2016). Embedded instruction improves vocabulary learning during auto-mated storybook reading among high-risk preschoolers. *Journal of Speech, Language, and Hearing Research, 59*(3), 484–500. https://doi.org/10.1044/2015 JSLHR-L-15-0227
- Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and special education*, 7(1), 6-10.
- Hargrave, A. C., & Sénéchal, M. (2000). A book reading intervention with preschool children who have limited vocabularies: The benefits of regular reading and dialogic reading.

*Early Childhood Research Quarterly, 15*, 75–90. https://doi.org/10.1016/S0885-2006(99)00038-1

- Hayiou-Thomas, M. E., Harlaar, N., Dale, P. S., & Plomin, R. (2010). Preschool speech, language skills, and reading at 7, 9, and 10 years: Etiology of the relationship. *Journal of Speech, Language, and Hearing Research*, *53*(2), 311–332. <u>https://doi.org/10.1044/1092-4388(2009/07-0145)</u>
- Hoover, W. A., & Gough, P. B. (1990). The simple view of reading. *Reading and writing*, 2(2), 127-160.
- Hockenberger, E. H., Goldstein, H., & Haas, L. S. (1999). Effects of commenting during joint book reading by mothers with low SES. Topics in Early Childhood Special Education, 19, 15–27. <u>https://doi.org/10.1177/027112149901900102</u>
- Justice, L. M., & Kaderavek, J. (2004). Embedded-explicit emergent literacy intervention I: Background and description of approach. *Language, Speech, and Hearing Services in Schools, 35*, 201–211.
- Kieffer, M. J. (2012). Early oral language and later reading development in Spanish-speaking English language learners: Evidence from a nine-year longitudinal study. *Journal of Applied Developmental Psychology*, 33(3), 146–157. <u>https://doiorg.proxy.lib.fsu.edu/10.1016/j.appdev.2012.02.003</u>
- Landry, S., Anthony, J., Swank, P., & Monseque-Bailey, P. (2009). Effectiveness of comprehensive professional development for teachers of at-risk preschoolers. *Journal of Educational Psychology*, 101, 448–465.

- McLeod, R. H., Kaiser, A. P., & Hardy, J. K. (2019). The relation between teacher vocabulary use in play and child vocabulary outcomes. *Topics in Early Childhood Special Education*, 39(2), 103-116.
- Morgan, P. L., & Meier, C. R. (2008). Dialogic reading's potential to improve children's emergent literacy skills and behavior. *Preventing school failure: alternative education for children and youth*, 52(4), 11-16. https://doi.org/10.3200/PSFL.52.4.11-16
- National Early Literacy Panel. (2008). *Developing early literacy: Report of the National Early Literacy Panel*. Washington, DC: National Institute for Literacy. http://www.nifl.gov/earlychildhood/NELP/NELPreport.html
- Noble, C., Cameron-Faulker, T., Jessop, A., Coates, A., Sawyer, H., Taylor-Ims, R., & Rowland,
  C. F. (2020). The impact of interactive shared book reading on children's language skills:
  a randomized controlled trial. *Journal of Speech, Language, and Hearing Research, 63*, 1878-1897.
- Neuman, S., & Cunningham, L. (2009). The impact of professional development and coaching on early language and literacy instructional practices. *American Educational Research Journal*, 46, 532–566.
- O'Fallon, M., Von Holzen, K., & Newman, R.S. (2020). Preschoolers' word-learning during storybook reading interactions: Comparing repeated and elaborated Input. *Journal of Speech, Language, and Hearing Research, 63*(3), 814–826. https://doi.org/10.1044/2019 JSLHR-19-00189
- Requa, M.K., Chen, Y.I., Irey, R., & Cunningham, A. (2021). Teaching parents of at-Risk preschoolers to employ elaborated and non-elaborated vocabulary instruction during

shared storybook reading. *Journal of Research in Childhood Education*, 36(1), 159-182. DOI: 10.1080/02568543.2021.1931579

- Snowling, M., Bishop, D. V. M., & Stothard, S. E. (2000). Is preschool language impairment a risk factor for dyslexia in adolescence? *Journal of Child Psychology and Psychiatry*, 41(5), 587–600. https://doi.org/10.1111/1469-7610.00651
- Snyder, P. A., Hemmeter, M. L., & Fox, L. (2015). Supporting implementation of evidencebased practices through practice-based coaching. *Topics in Early Childhood Special Education*, 35(3), 133–143. <u>https://doi.org/10.1177/0271121415594925</u>
- Suggate, S., Schaughency, E., McAnally, H., & Reese, E. (2018). From infancy to adolescence:
  The longitudinal links between vocabulary, early literacy skills, oral narrative, and
  reading comprehension. *Cognitive Development*, 47, 82–95.

https://doi.org/10.1016/j.cogdev.2018.04.005

- Thal, D. J., O'Hanlon, L., Clemmons, M., & Fralin, L. (1999). Validity of a parent report measure of vocabulary and syntax for preschool children with language impairment. *Journal of Speech, Language, and Hearing Research*, 42(2), 482-496.
- Trivette, C. M., Simbus, A., Dunst, C. J., & Hamby, D. W. (2012). Repeated book reading and preschoolers' early literacy development. *Center for Early Literacy Learning*, *5*(5), 1–13
- Towson, J. A., Fettig, A., Fleury, V. P., Abarca, D. L. (2017). Dialogic reading in early childhood settings: A summary of the evidence base. *Topics in Early Childhood Special Education*. 37(3),132-146. <u>https://doi.org/10.1177/0271121417724875</u>.
- Towson, J. A., Gallagher, P. A., & Bingham, G. E. (2016). Dialogic reading: Language and preliteracy outcomes for young children with disabilities. *Journal of Early Intervention*, 38(4), 230–246. <u>http://dx.doi.org/10.1177/1053815116668643</u>

- U.S. Department of Education, Institute of Education Sciences, What Words Clearinghouse.
   (2015, April). Early Childhood Education intervention report: Shared book reading.
   Retrieved from <u>http://whatworks.ed.gov</u>
- U.S. Department of Education, Institute of Education Sciences, What Words Clearinghouse. (2010, April). *Early Childhood Education intervention report: Dialogic reading*. Retrieved from <u>http://whatworks.ed.gov</u> Van Kleeck, A. (2008). Providing preschool foundations for later reading comprehension: The importance of and ideas for targeting inferencing in storybook-sharing interventions. *Psychology in the Schools*, 45,627–643. https://doi.org/10.1002/pits.20314
- van Kleeck, A., Vander Woude, J., & Hammett, L. (2006). Fostering literal and inferential language skills in Head Start preschoolers with language impairment using scripted booksharing discussions. *American Journal of Speech-Language Pathology*, 15, 85–95. https://doi.org/10.1044/1058-0360(2006/009)
- Walsh, R. L., & Hodge, K. A. (2016). Are we asking the right questions? An analysis of research on the effect of teachers' questioning on children's language during shared book reading with young children. *Journal of Early Childhood Literacy*, 18(2), 264-294. https://doi.org/10.1177/1468798416659124
- Whitehurst, G. J., Falco, F., Lonigan, C. J., Fischel, J. E., Valdez-Menchaca, M. C, & Caulfield,
   M. (1988). Accelerating language development through picture-book reading.
   Developmental Psychology, 24, 552-558. <u>https://doi.org/10.1037/0012-1649.24.4.552</u>
- Zucker, T. A., Justice, L. M., Piasta, S. B., & Kaderavek, J. N. (2010). Preschool teachers' literal and inferential questions and children's responses during whole-class shared reading. *Early Childhood Research Quarterly*, 25, 65–83. doi:10.1016/j.ecresq.2009.07

# Table 1

# PBC Components & Associated Actions

PBC Component	Associated Actions			
Stage 1: Needs	Needs Assessment			
Assessment/Goal	• Coach and educator will meet and work collaboratively to determine the educator behaviors			
Setting/Action Planning	to be targeted, based upon coach's initial observations of book-reading sessions			
	<ul> <li><u>Goal Setting</u></li> <li>Educator and coach will create an individualized goal related to the targeted strategies (i.e.,</li> </ul>			
	• Educator and coach will create an individualized goal related to the targeted strategies (i.e., question prompts/evaluate, expansions, or repeat)			
	Action Plan			
	• Will include information addressing: (a) specific behaviors educators will implement to meet			
	their goal, and (b) supports coach will provide, aligned with the educator's behaviors			
Stage 2: Focused Observation	<ul> <li>Coaches will collect on-site observation data as well as video and anecdotal notes to share with the educator, at least once per week; Coach will provide support in the form of modeling role play, or guided practice and follow-up with an email summarizing the conversation</li> <li>For sessions when the coach is not onsite, video of the book-reading session will be reviewed by the coach in preparation for the next coaching session</li> </ul>			
Stage 3: Reflection & Feedback	• After the book-reading session, coach and educator will meet to identify what was effective and what barriers exist in order to refine implementation of the specific target behavior and determine if the weekly goal has been met			
	• If the goal was not met, the coach and educator discuss the reason(s) why and create a new goal and action plan including steps the educator and coach will take to address identified barriers			

# Table 2

# Sample Action Plan

Name: Sam	Coach: Morgan	Date: 11.18.21
Name of Book: To Catch a Star		
-	rease the use of label and questioning prompts	
book and evaluate the child respond to these	e questions in 100% of opportunities across 3 r	eading sessions.
What will I do to meet my goal?	What supports and resources/materials do I	Completed?
what whill do to moot my gour.	need from the coach?	Yes or No
Write out question prompts and evaluation	Weekly meeting to review	Yes
responses before the book reading session	Cues within routine	
for each target vocabulary word	Modeling	
	Email feedback	
	Other	
Put a sticky note on the pages of the book	Weekly meeting to review	Yes
where questions are to be asked	Cues within routine	
	Modeling	
	Email feedback	
	Other	
Provide individualization opportunities	Weekly meeting to review	Yes
(e.g., student R)	Cues within routine	
Adding gestures to targeted words	Modeling	
Sitting directly next to R	Email feedback	
Asking R to help turn the pages	Other	

# Figure 1

Sample Educator Worksheet & Data Collection Form

Target Word & Definition	Question Prompt & Evaluate	Expansion	Repeat
<u>Chameleon</u> : A lizard that changes colors	Target That is a lizard that can change colors. What is it called? <i>Correct: That's right, it is a</i> <i>chameleon</i> <i>Incorrect: It is a chameleon</i>	It can be lots of different colors	Prompt child: "Say, lots of different colors"
	Definition The chameleon is yellow, green, blue, and purple (pointing). What is a chameleon? <i>Correct: That's right, it's a lizard</i> <i>Incorrect: It's a lizard</i>	It can change colors	Prompt child: "Say, it can change colors"
	Inference How do you know it's a chameleon? Correct: That's right, because it changes colors Incorrect: It changes colors	And looks like a lizard	Prompt child: "Say, and looks like a lizard"
Target Vocabulary Word	<i>Question Prompt: Mark type</i> <i>when complete</i> <i>Evaluation: Indicate Y/N</i>	Expansion: Indicate Y/N for each question type and write what teacher says	<i>Repeat: Indicate (Y/N) for each question type</i>
Chameleon	Target Definition Inference		

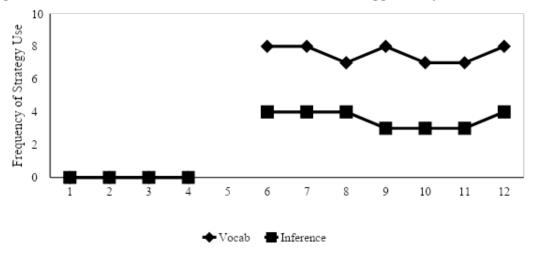
Figure 1

Performance Feedback Example

Participant: Sam Coach: Morgan Date: 12/3/2021

My Data for Week of: November 30, 2021

My goal for the week: Give definitions whenever there is an opportunity



Summary of Graphed Data:

- For Jabari Jumps, at least 7 out of 8 label/definition questions were asked across 3 readings. Three out of four inference questions were asked each day. Did I meet my goal?
- yes, evidence in videos of ladder definition Samples of video for review and anecdotal notes:
   Definition of ladder given at 9:29

Label for surprise was given at 7:20