



Pre-service teacher use of communication strategies upon receiving immediate feedback[☆]



Christan Grygas Coogle^{a,*}, Naomi L. Rahn^a, Jennifer Riggie Ottley^b

^a West Virginia University, College of Education and Human Services, West Virginia University, PO Box 6122, Morgantown, WV 26506, United States

^b The Ohio State University, 175 East Seventh Avenue, Columbus, OH 43201, United States

ARTICLE INFO

Article history:

Received 31 July 2014

Received in revised form 15 February 2015

Accepted 1 March 2015

Available online 22 March 2015

Keywords:

Bug-in-ear coaching

Communication strategies

Pre-service teachers

Autism

Personnel preparation

ABSTRACT

The purpose of this research was to investigate the impact of immediate feedback through bug-in-ear eCoaching on early childhood special education pre-service teachers' use of communication strategies using an activity-based intervention approach. Three early childhood special education pre-service teachers participated in this study. A multiple-probe, single-case design was used to determine the effects of immediate feedback through bug-in-ear eCoaching on teachers' use of communication strategies. Results indicate that immediate feedback through bug-in-ear eCoaching enhanced pre-service teachers' use of communication strategies within small-group activities. Implications for practice and future research are discussed.

© 2015 Elsevier Inc. All rights reserved.

Introduction

Communication interventions for young children at risk for disabilities as well as those with disabilities is important as oral language is a critical skill that predicts reading comprehension (Lonigan & Shanahan, 2009) and school readiness (Rimm-Kaufman, Pianta, & Cox, 2000). Children who exhibit communication delays are at risk for developing problem behaviors and delays in literacy development (Horner, Carr, Strain, Todd, & Reed, 2002; Rayner, Foorman, Perfetti, Pesetsky, & Seidenberg, 2001; Tager-Flusberg et al., 2009). Children with autism frequently experience delays in communication and benefit from interventions targeting specific communication skills (Tager-Flusberg et al., 2009). Therefore, it is important to identify interventions that produce promising communication outcomes for these children.

Embedded instruction for young children with autism

Embedded-communication interventions are those strategies occurring within typical classroom routines and activities that are

designed to increase children's functional communication skills. Numerous studies have demonstrated the effects of embedded-communication interventions on the communication development of children with autism (Rogers & Vismara, 2008; Tager-Flusberg et al., 2009). Unfortunately, it is often a challenge for teachers in inclusive settings to use embedded interventions (Dinnebeil, Pretti-Fontczak, & McInerney, 2009; Jung, Gomez, Baird, & Keramidas, 2008). With strong evidence indicating the effectiveness of embedded interventions to support young children's development (Ozen & Ergenekon, 2011; Rakap & Parlak-Rakap, 2011; Sandall, Schwartz, & Joseph, 2001), it is critical to train pre-service early childhood teachers to use embedded interventions within typical classroom environments.

Embedded-communication interventions are most effective when the intervention begins early, includes social uses of language, and occurs with sufficient intensity to facilitate acquisition and generalization of new skills (Hancock & Kaiser, 2002). Importantly, teaching communication skills in children's natural environments has resulted in increased vocabulary, maintenance, generalization, and spontaneous use of language for children with autism (Mancil, 2009). One approach that is implemented in the natural environment, includes the social use of language, and allows for high intensity and duration of learning opportunities is activity-based intervention (ABI).

ABI is a child-directed approach to teaching that embeds learning opportunities on children's goals and objectives during routines, as well as planned and child-initiated activities (Macy, 2007; Ozen & Ergenekon, 2011; Pretti-Fontczak & Bricker, 2004).

[☆] Ottley's efforts in this research are supported by the Institute of Education Sciences, U.S. Department of Education, through Grant R305B120008 to The Ohio State University. The opinions expressed are those of the author and do not represent views of the Institute or the U.S. Department of Education.

* Corresponding author. Tel.: +1 304 293 7292.

E-mail addresses: christan.coogle@mail.wvu.edu (C.G. Coogle), naomi.rahn@mail.wvu.edu (N.L. Rahn), riggie.2@osu.edu (J.R. Ottley).

Teachers use logically occurring antecedents and consequences to develop functional and generalizable skills (Ozen & Ergenekon, 2011; Pretti-Frontczak & Bricker, 2004). ABI is a well-known, evidence-based naturalistic teaching strategy used throughout the day with children having a wide range of special needs (McBride & Schwartz, 2003; Ozen & Ergenekon, 2011). Although ABI is an effective approach (Pretti-Frontczak, Barr, Macy, & Carter, 2003), it is used infrequently or with limited fidelity by classroom teachers (Horn & Banerjee, 2009; McBride & Schwartz, 2003). Various intervention strategies, including those specific to communication, can be embedded using ABI. Thus, ABI can be particularly beneficial for children with autism, as their communication needs can be addressed multiple times throughout the day within highly motivating activities (Woods, Wilcox, Friedman, & Murch, 2011).

Preparing pre-service teachers to support young children with autism

Given that evidence-based practices, including ABI, are often not being implemented by teachers in the classroom, a research-to-practice gap exists (McLeskey & Billingsley, 2008). Researchers recognize that learning is enhanced when pre-service teachers are provided multiple opportunities to practice skills (Allsopp, DeMarie, Alvarez-McHatton, & Doone, 2006). Therefore, it is important to allow pre-service teachers opportunities to practice newly acquired skills, such as the ABI approach, during field experiences as this can help teachers apply knowledge and develop proficiency in new skills (Ostrosky, Mouzourou, Danner, & Zaghlawan, 2013) so that children with autism receive the highest quality instruction.

Feedback

Feedback is one characteristic of quality early childhood special education (ECSE) field experiences that is malleable (Macy, Squires, & Barton, 2009); university supervisors and others working with pre-service teachers can modify and adjust feedback to enhance pre-service teacher learning. From their literature review of effective methods for providing feedback, Scheeler, Ruhl, and McAfee (2004) concluded that corrective, immediate, positive, and specific feedback are promising practices that result in changes in teacher behavior. Research indicates that teachers are able to adjust their practices when provided immediate feedback (Hemmeter, Snyder, Kinder, & Artman, 2011; Hsieh, Hemmeter, McCollum, & Ostrosky, 2009; Scheeler et al., 2004). Researchers have since challenged this finding by suggesting that even delayed performance feedback has the potential to change teacher behavior (Solomon, Klein, & Polityl, 2012). Although there is evidence demonstrating positive change in both delayed and immediate performance feedback, a plethora of researchers have examined the immediacy of feedback using bug-in-ear (BIE) coaching (Lindell, 2001; Scheeler, Congdon, & Stansbery, 2010). For example, Herold, Ramirez, and Newkirk's (1971) research provided early support that immediate feedback given to teachers using BIE coaching was more effective than traditional methods of providing feedback at the conclusion of a supervision session.

Other researchers found less compelling results. For example, Giebelhaus (1994) found that pre-service teachers receiving BIE coaching from cooperating teachers outperformed a control group of pre-service teachers who received traditional feedback from cooperating teachers on only one of the 14 measured behaviors. Further, outcomes of Lindell's (2001) experimental study with pre-service teachers either receiving BIE feedback, delayed feedback, or no feedback were similar, with teachers in the BIE group outperforming the other groups in only one of seven behaviors. Although findings from these two studies seem bleak, there were several implications from these and other early BIE studies (Thomson,

Holmberg, Baer, Hodges, & Moore, 1978; Van der Mars, 1988) that have influenced the implementation and, thereby, effectiveness of BIE coaching for pre-service teachers. For instance, university supervisors using BIE coaching now use promising practices such as targeting a small number of discrete-teaching behaviors (Scheeler & Lee, 2002), fading BIE coaching (Scheeler, McAfee, Ruhl, & Lee, 2006), planning for generalization (Scheeler, Bruno, Grubb, & Seavey, 2009), and measuring the type and content of BIE feedback (Kahan, 2002).

The improvements in implementation of BIE coaching have resulted in better outcomes for pre-service teachers. For example, the five pre-service special education teachers in Scheeler et al. (2009) study improved upon their complete use of three-term contingency trials to at least 90% when receiving BIE coaching. In another of Scheeler et al. (2006) studies, BIE coaching was used to improve pre-service teachers' instructional practices, and as a result, some children in their classrooms also improved in their targeted outcomes.

Recently, BIE technology has been used to provide distance, electronic coaching (eCoaching) to pre-service teachers (Rock et al., 2009, 2012; Scheeler, McKinnon, & Stout, 2012). In their seminal study, Rock et al. (2009) examined the use of BIE eCoaching on graduate-level teachers' change in teaching behaviors and classroom climate. Their online, wireless technology included an ultra-wide angle web camera, a Bluetooth Headset™, a Bluetooth USB Adapter, and Skype™ video-conferencing software. Rock and colleagues found that BIE eCoaching improved teachers' use of high-access teaching behaviors and praise statements. Furthermore, student engagement increased from 73.8% to 92.7%. Findings from these studies have led researchers to suggest that BIE eCoaching can improve pre-service teachers' instructional practices and children's outcomes.

Scheeler et al. (2012) also demonstrated that BIE eCoaching can be an effective and feasible means to provide pre-service teachers with immediate feedback on their teaching practices. Furthermore, Rock et al. (2014) provide evidence that the pre-service teachers' and children's outcomes were sustainable with the removal of BIE eCoaching. While these studies provide evidence that immediate feedback provided via BIE eCoaching can increase teachers' use of evidence-based practices, this advanced technology has not been applied to ECSE pre-service teachers teaching in an inclusive environment where children with autism are a part of typical classroom activities and routines. ECSE settings are unique as they are typically inclusive environments where teachers are charged with a challenging task: meeting the needs of diverse learners including those who are typically developing as well as those with developmental delays and disabilities through naturally occurring activities and routines. Further research is needed to identify the effect of feedback on ECSE pre-service teachers' practices, specifically related to effective-teaching strategies (ABI and communication strategies), in inclusive environments, with children from high-need populations (i.e., autism). This study extends the research on BIE eCoaching by using short 10-min feedback sessions targeting ECSE pre-service teachers in inclusive environments while teaching at least one young child with autism. Further, using a new form of technology, Swivl, allowed the pre-service teachers the flexibility to navigate the classroom environment as they typically would during teaching sessions, which may enhance the feasibility of BIE eCoaching in ECSE settings where teachers are often moving around the classroom as they follow a child's lead.

Research questions

Although immediate feedback using BIE technology has been found to be effective in changing educators' instructional practices (Scheeler et al., 2004), using immediate feedback through BIE

Download English Version:

<https://daneshyari.com/en/article/353717>

Download Persian Version:

<https://daneshyari.com/article/353717>

[Daneshyari.com](https://daneshyari.com)