

Effective Coaching: Improving Teacher Practice and Outcomes for All Learners

PURPOSE OF THE BRIEF

The purpose of this brief is to synthesize research on coaching¹ and to offer a framework of effective coaching practices.

- **Part 1** provides general information on coaching, including the need for coaching and the goals of coaching.
- **Part 2** describes critical coaching practices that are linked to improvements in teacher practice and learner outcomes. **As these practices are most associated with such improvements, they are the recommended practices that should be central to the every-day routine of coaches working in** general education or special education settings, as well in environments (e.g., homes, schools, childcare centers) with learners of all ages.
- **Appendix A** contains information about various coaching models commonly cited in research and applied in the field (e.g., literacy coaching, behavior coaching, math coaching).

This brief is intended to be used in conjunction with the tool entitled *Implementation Guide for Coaching*. Research from Implementation Science suggests that how a program, practice, or innovation is put into place impacts the degree to which we can expect that innovation to achieve its intended goals (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005; Greenhalgh, Macfarlane, Bate, Kyriakidou, 2004). Similarly, it is important to attend to how the innovation is implemented. Drawing upon principles of Implementation Science, the guide outlines key areas that should be considered and action steps that should be taken when using coaching as a pathway toward improving teacher practice and learner outcomes.

¹Although we use the label “teacher” throughout this document, the term is used to denote those who work with learners in a less traditional educational setting (i.e., the home) such as an early childcare provider, interventionist, or parent. We also use the term to describe those working with learners in a more traditional setting (i.e., the classroom) such as a prekindergarten-12th grade teacher. Further, we use the term “learner” to describe the infants, toddlers, children, and youth with whom these teachers work.

PART 1: GENERAL INFORMATION ON COACHING

The Promise of Coaching

Education holds a clear affinity for coaching as a method for improving teacher practice and learner outcomes. In fact, support for coaching can be found across research and literature from general education (Shanklin, 2006; Neumann & Wright, 2010; Biancarosa, Bryk, & Dexter, 2010) and special education (Kretlow & Bartholomew, 2010; Winton, Snyder, & Goffin, 2015) focused on infants, toddlers, young children (Snyder, Hemmeter, & Fox, 2015; Israel, Carnahan, Snyder, & Williamson, 2013) as well as learners in the K-12 school setting (Kretlow & Bartholomew, 2010; Horner, 2009). Despite the fact that coaching research suggests that it does not *necessarily* lead to improved outcomes among teachers and learners (Gamse, Jacob, Horst, Boulay, Unlu, 2008; Bean, Draper, Hall, Vandermolen, & Zigmond, 2010), Joyce and Showers' (1982) seminal research remains one of the most resounding messages about the potential for coaching. These researchers found that the common form of professional development (PD) such as PD; infrequent and decontextualized training resulted in the implementation of less than 20 percent of new practices in the classroom setting. Conversely, Joyce and Showers found that training reinforced by ongoing coaching led to 80 percent to 90 percent of implementation of new practices.

Coaching also is included as an aspect of effective implementation across various fields, including education (Fixsen, Blase, Naoom, Wallace, & Friedman, 2005), health services (Damschroder, Aron, Keith, Kirsch, Alexander, & Lowery, 2009), and nursing (Kitson, Harvey, & McCormack, 1998). Implementation frameworks from these different fields promote the idea that coaching helps practitioners bridge the research-to-practice gap by continually developing and honing teachers' skills learned in initial trainings.

Drawing from this research, coaching has been suggested as a strategy for improving teaching and learning across overall systems (e.g., Metz, 2015; Sugai & Horner, 2006). Although less is known about the degree to which coaching can transform teacher practices within an entire system as well as the practice of individual teachers, a variety of educational organizations and technical assistance networks have embraced coaching for this purpose (e.g., The State Implementation of Scaling Up of Evidence-Based Practices, or SISEP; Positive Behavior Intervention and Supports Technical Assistance Center).

Perhaps because coaching has been so widely embraced, many different models of this form of PD now exist in a host of learning environments (i.e., day care, classroom, or home). Coaches may provide support with early learning, literacy, math, or behavior as they work in these different settings. Subsequently, coaches often may fulfill a wide range of responsibilities. For example, coaches may analyze data, maintain action plans or other records of progress, or directly work with teachers. For descriptions of models and key responsibilities, refer to the Appendix.

However, despite the variability in coaching roles and responsibilities, few certification programs or university preparation programs exist that specifically train and produce coaches (Denton & Hasbrouck, 2009; Galluci, Van Lare, Yoon, & Boatright, 2010). Given variation that occurs with coaching- as well as the expectation that coaching produces powerful changes in teaching and learning-educators and leaders alike benefit from a clear understanding of who may be coached, who typically serves as coach, and the goals of coaching. Moreover, it is important to ensure that coaching consists of effective coaching practices. The following sections address these topics.

Who Is a Coach? Who Is Coached?

Frequently, the role of the coach is performed by a range of adults. For example, general education and special education teachers with expertise in instructional practices and school psychologists often assume the role of coach (Denton & Hasbrouck, 2009; Kretlow & Bartholomew, 2010; Snyder et al., 2015; Stormont & Reinke, 2012). Although new general and special education teachers oftentimes are coached, experienced teachers may benefit from coaching as well (Kretlow & Bartholomew, 2010). In the context of early learning, parents or caregivers may be coached (Snyder et al., 2015). Coaching also has occurred within the juvenile justice setting, with experts in behavior serving as coaches for facility-level leadership teams and juvenile correction officers (Sprague, Scheuermann, Wang, Nelson, Jolivette, & Vincent, 2013).

Some educational organizations suggest that coaching ratios should remain small (e.g., one coach per school or early childcare setting); however, in the real-world application of coaching, these ratios may not be feasible (International Reading Association, 2004; Mangin, 2009). Existing research on coaching has not yet offered definitive recommendations for ideal teacher-coach ratios.

Goals of Coaching

Despite the diversity that exists with coaching, the goals of this form of professional development remain focused on two areas:

- Improving teaching practice, with a particular emphasis on increasing the use of practices shown to be highly effective, including evidence-based practices (Knight, 2009; Kretlow & Bartholomew, 2010; Neufeld & Roper, 2003; Snyder et al., 2015).
- Improving learner academic and behavioral outcomes through improved teaching practices (Bean, Knaub, & Swan, 2000; Joyce & Showers, 2002; Kretlow & Bartholomew, 2010; Snyder et al., 2015).

The next section will present research on coaching practices that are most likely to lead to the achievement of these two goals.

PART 2: EFFECTIVE COACHING—IMPROVING TEACHER PRACTICE AND LEARNER OUTCOMES

Defining Effective Coaching Practices

Experimental and qualitative research supports the idea that several specific coaching practices are linked to improved teacher practice. In fact, these coaching practices can be effective in the early childhood setting (Snyder et al., 2015; Winton et al., 2015) as well as in the K-grade 12 classroom (Biancarosa, Bryk, & Dexter, 2010; Kretlow & Bartholomew, 2010; Neuman & Cunningham, 2009; Wehby, Maggin, Partin, & Robertson, 2012). Although an emerging line of research exists on coaching teachers of infants, toddlers, and the very youngest learners (Snyder et al., 2015), less is known about the impact of these coaching practices on these children. Despite this point, coaching practices with the strongest evidence for improving teacher practice and learner outcomes include the following:

- Observation
- Modeling (also referred to as “demonstration”)
- Performance Feedback
- Alliance-Building Strategies also referred to as “relationship-building strategies”)

See Figure 1.

This section of the brief provides a review of these high-quality coaching practices. It is important to note that as originally found by Joyce and Showers (1982), these coaching practices typically occur after teachers participate in didactic instruction (e.g., workshops, institutes, trainings) as a way to ensure content is applied to the learning environment.

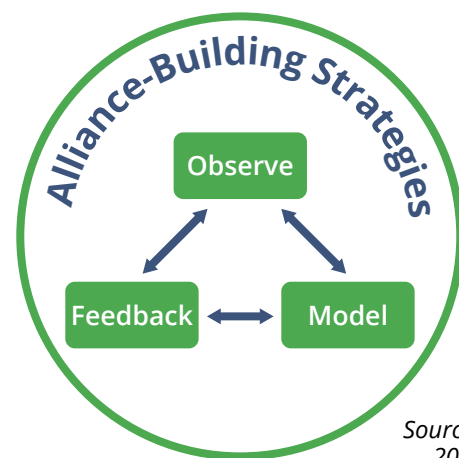
Observation

Observation refers to direct monitoring of the teacher in a learning environment. The primary purpose of observation is to enable a coach to engage in other coaching practices such as modeling or providing performance feedback (Kretlow & Bartholomew, 2010; Neuman & Cunningham, 2009; Stormont & Reinke, 2012; Snyder et al., 2015). For example, observation allows the coach to collect data on the teacher’s use of an evidence-based practice; or, it may provide opportunities for the coach to model the use of that same evidence-based practice. Given that observation is considered as the entry point for using other coaching practices, it is often studied in tandem with other coaching practices

Modeling

Modeling occurs when a coach demonstrates how to use the practice. Modeling is most typically used by a coach when a teacher is not correctly using a practice with the learner or does not know how to use that practice. However, modeling may also occur when learners are not present (i.e., during a training or during a postobservation meeting with the teacher). The primary purpose of in-classroom-situated modeling is to help the teacher better understand how the accurate use of a practice “looks” and how it impacts the performance of the learner (Kretlow and Bartholomew, 2010; Neuman & Cunningham, 2009; Winton et al., 2015).

Figure 1. Effective Coaching Practices



Source: Pierce, 2015, p. 27.

- **Modeling can support improvements in teachers' academic practices** (Biancarosa et al., 2010; Kim et al., 2011; Kretlow, Cooke, & Wood, 2012; Neuman & Cunningham, 2009; Neuman & Wright, 2010) **and behavioral practices** (Barton, Chen, Priblle, Pomes, & Kim, 2013; Bethune & Wood, 2013; Kohler, Crilley, Shearer, & Good, 1997; Kretlow & Bartholomew, 2010).
- **Coaching that integrates modeling supports improvements in learner academic outcomes** (Biancarosa et al., 2010; Kim et al., 2011; Neuman & Cunningham, 2009; Neuman & Wright, 2010; for special education settings, see Barton et al., 2013; Bethune & Wood, 2013).
- **Modeling also supports improvements in learner behavioral outcomes** (Domitrovich, Gest, Jones, Gill, & DeRousie, 2010; Filcheck, McNeil, Greco, & Bernard, 2004).

Performance Feedback

Providing performance feedback is a third critical coaching practice and entails the coach's presentation of data to the teacher on his or her teaching practice. Providing this type of feedback is highly effective in improving early childhood teacher practice (Shannon, Snyder, & McLaughlin, 2015; Artman-Meeker & Hemmeter, 2012; Diamond & Powell, 2011) as well as K-grade 12 teacher practice *and* learner outcomes (Cornelius & Nagro, 2014; Scheeler, Ruhl, & McAfee, 2004; Solomon, Klein, & Politylo, 2012; Stormont, Reinke, Newcomer, Marchese, & Lewis, 2015). In fact, giving feedback is so effective in improving teacher practice and K-grade 12 learner outcomes that it is considered by some researchers as an evidence-based practice (Fallon, Collier-Meek, Maggin, Sanetti, & Johnson, 2015; Solomon et al., 2012; Stormont et al., 2015). Some studies of performance feedback also suggest early learning outcomes may also improve (Snyder et al., 2015).

In addition, research on feedback suggests the following:

- **Feedback is most effective when it is specific, positive, timely, and corrective, if warranted** (Scheeler et al., 2004; Solomon et al., 2012).
 - Specific feedback, as opposed to general feedback, includes precise information about teaching practices that benefit learners. General feedback (e.g., "Great teaching!") may not explain to teachers why some teaching practices are more effective than others. Specific feedback clarifies how teachers' practices directly impact learning (e.g., "During small-group instruction, four out of five learners were actively engaged in the task you assigned").
 - Positive feedback includes overt statements of praise for the teacher's use of specific practices (e.g., "Good job using 'stating behavioral expectations' during the morning meeting").
 - Corrective feedback, used only when warranted, involves the use of statements and questions that suggest that a change to teaching practice is needed (e.g., "Learners were redirected seven times in the 20-minute lesson. How can we increase praise for learners while reducing redirections?").
 - The timeliness of feedback also seems to be important. Feedback is considered timely when it is delivered within roughly the same day of an observation (Scheeler et al., 2004).
- **Coaches can use several delivery mechanisms for providing feedback.**
 - While feedback can be discussed in a face-to-face postobservation conference (Kretlow & Bartholomew, 2010; Conroy, Sutherland, Algina, Wilson, Martinez, & Whalon, 2014; Snyder et al., 2015), it also may be provided via bug-in-ear technology (Scheeler et al., 2004). This technology allows for a coach to observe (i.e., visual and provide feedback).
 - Some recent research draws on the use of video-based technology to present written and verbal feedback (Israel, Carnahan, Snyder, & Williamson, 2013; Artman-Meeker, Fetting, Barton, Penney, & Zeng, 2015). It is unclear, however, whether this format for providing feedback improves both teacher practice and outcomes among learners of all ages, as much of this research focuses on early learners

- **Feedback may be based on informal or formal data that are presented verbally, graphically, or both** (Neuman & Cunningham, 2009; Scheeler et al., 2004; Snyder et al., 2015).
 - Formal data may consist of learner engagement data, whereas informal data may consist of qualitative notes on the learning environment.
 - Graphs, charts, and oral feedback are frequently used to deliver feedback (Solomon et al., 2012). Such feedback may be particularly powerful when used to develop action plans, goals, or to help teachers engage in problem solving processes as they attempt to implement new practices (Shannon, Snyder, & McLaughlin, 2015).

Alliance Building Strategies

A final critical coaching practice includes the development of a positive teacher-coach relationship, also referred to as alliance (Ippolito, 2010; Snyder et al., 2015; Mraz, Algozzine, & Watson, 2008; Neufeld & Roper, 2003; Shanklin, 2006; Wehby et al., 2012). Strong alliance between teachers and coaches establishes a solid foundation for subsequent work between the dyad. Within the early learning environment, alliance has been referred to as a “collaborative partnership” (Snyder et al., 2015, p. 135), which is a cornerstone of productive coaching. Some research from early learning suggests that alliance is also important across coaches, teachers, and families (Basu, Salisbury & Thorkildsen, 2010; Rush & Shelden, 2011).

Research on teacher-coach alliance offers the following conclusions:

- **Alliance is shaped by several factors:**
 - **interpersonal skills** (Ippolito, 2010; Neuman & Wright, 2010; Walpole & Blamey, 2008),
 - **collaboration skills** (Neuman & Wright, 2010; Vanderburg & Stephens, 2009; Walpole, McKenna, Uribe-Zarain, & Lamitina, 2010; Shannon, Snyder, & McLaughlin, 2015),
 - **the coach’s expertise in area in which he or she is coaching** (Cantrell & Hughes, 2008; Chval et al., 2010; Gallucci et al., 2010; Snyder et al., 2015). An alliance may also be shaped by teachers’ perceptions of coaching as evaluative (Mangin, 2009; Matsumura, Garnier, & Resnick, 2010; Matsumura, Sartoris, Bickel, & Garnier, 2009; Walpole et al., 2010).
- **Specific strategies can be used by coaches to build alliance** (Becker, Bradshaw, Domitrovich, & Ialongo, 2013; Ippolito, 2010; March & Gaunt, 2013; Wehby et al., 2012).
- **Positive teacher-coach alliance correlates with improved teacher practice; however, it is unclear how alliance impacts learner outcomes** (Wehby et al., 2012).
- **The use of specific alliance building strategies can lead to increased use of behavioral interventions by teachers** (See Figure 2; Pierce, 2015).

Table 1 summarizes critical coaching practices and offers suggestions for when these practices can be used by coaches.

Table 1. Effective Coaching Practices and Suggestions for Use

Effective Coaching Practices	Description	When Used
Observation	Watching the teacher ² in the classroom environment use a specific program, intervention, or practice (including EBPs)	Every coaching cycle
Modeling, also referred to as demonstration	Showing the teacher how to use a specific program, intervention, or practice (including EBP)	Based on need (e.g., when teacher is unfamiliar with practice or uses practice incorrectly)
Performance Feedback	<p>Presenting formal or informal data about the teacher’s use of a specific program, intervention, or practice (including EBP)</p> <p>Characteristics of effective feedback:</p> <ul style="list-style-type: none"> • Specific • Positive • Corrective (if warranted) • Timely <p>Delivery mechanisms:</p> <ul style="list-style-type: none"> • Verbal, written, or graphical data presented during pre–post observation conferences with a teacher or in the moment of teaching (e.g., using bug-in-ear technology) 	Every coaching cycle
Alliance Building Strategies	<p>Using specific strategies that relate to factors of alliance to build a positive relationship in a teacher–coach dyad</p> <p>Factors of alliance:</p> <ul style="list-style-type: none"> • Interpersonal skills • Collaboration • Expertise • Conveying coaching is non-evaluative <p>Examples of alliance-building strategies:</p> <ul style="list-style-type: none"> • Empathetic listening • Restating and summarizing information conveyed by the teacher • Conveying expertise in teaching and deep content-area knowledge • Identifying and working toward teachers’ goals and needs 	Every coaching cycle

Note. EBP = Evidence-based practice.

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Strategies for Building Alliance

Figure 2 summarizes the strategies coaches can use to build alliance with teachers. Strategies are listed in the row on the right. These strategies correspond to three primary factors of alliance (i.e., interpersonal skills, collaboration, and expertise). For example, when a coach summarizes teacher comments, that coach may be showing strong interpersonal skills. Strong interpersonal skills are one factor in building alliance.

Figure 2. Coaching Strategies to Build Alliance with Teachers

<p>Interpersonal Skills: Effective communication. Building trust. Nonevaluative & nonjudgmental language.</p>	<ul style="list-style-type: none"> • Summarize: “What I hear from your comments is...” • Open-ended questions: “Can you tell me more about that?” • Affirm difficulty of change: “This is really hard!” • Nonevaluative language: “Coaching is about supporting your teaching practice, not about evaluating how you teach.”
<p>Collaboration: Meeting needs and goals. Conveying that improving teaching is teamwork.</p>	<ul style="list-style-type: none"> • Refer to past accomplishments: “This week you hoped to accomplish...” • Refer to current goal: “Your goal for this week is....” • Help teacher progress toward goal: “Let’s talk about what we’ll do to meet that goal. I can.... What do you think you will try to do.”
<p>Expertise: In teaching in the content area.</p>	<ul style="list-style-type: none"> • Refer to effective teaching practices: “Learners who struggle to show mastery benefit from explicit and systematic instruction. Explicit means...” • Convey deep content-area knowledge: “We know that effective reading instruction focuses on the five pillars of reading. These include...” • Explain complex concepts succinctly: “The Tier 3 learner may show challenging behavior because...”

Source: Pierce, 2015, p. 138.

APPENDIX

This appendix contains a list of coaching models commonly found in research on this form of professional development. Although commonalities exist across these descriptions of coaching, individual coaches often show great variation in how they approach working with teachers (Deussen, Coskie, Robinson, & Autio, 2007; Denton & Hasbrouck, 2009; Snow, Ippolito, & Schwartz, 2006). With this point in mind, it is important that coaching relies on the specific practices linked to improved teacher practice and learner outcomes as described in Part 2 of this brief, rather than a particular coaching model.

Instructional Coaching Across Content Areas

Denton, C. A., & Hasbrouck, J. (2009). A description of instructional coaching and its relationship to consultation. *Journal of Educational and Psychological Consultation*, 19(2), 150–175.

Knight, J. (2007). *Instructional coaching: A partnership approach to improving instruction*. Thousand Oaks, CA: Corwin Press.

Literacy Coaching

Bean, R., & Isler, W. (2008). *The school board wants to know: Why literacy coaching?* Urbana, IL: Literacy Coaching Clearinghouse.

Retrieved from <http://www.literacycoachingonline.org/briefs/SchoolBoardBrief.pdf>

Deussen, T., Coskie, T., Robinson, L., & Autio, E. (2007). "Coach" can mean many things: Five categories of literacy coaches in Reading First (Issues and Answers Report, REL 2007–No. 005). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northwest.

Gamse, B. C., Jacob, R. T., Horst, M., Boulay, B., Unlu, F., Bozzi, L.,...Rosenblum, S. (2008). *Reading First Impact Study final report* (NCEE 2009-4038). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences.

International Reading Association. (2004). *The role and qualifications of the reading coach in the United States*. Newark, DE: Author.

International Reading Association. (2006). *Standards for middle and high school literacy coaches*. Newark, DE: International Reading Association.

McKenna, M. C., & Walpole, S. (2008). *The literacy coaching challenge: Models and methods for grades K-8* (Vol. 9). New York: Guilford Press.

Sailors, M., & Shanklin, N. L. (2010). Introduction: Growing evidence to support coaching in literacy and mathematics. *Elementary School Journal*, 111(1), 1–6.

Mathematics Coaching

Hansen, P. (2013). *Mathematics coaching handbook: Working with teachers to improve instruction*. New York: Routledge.

Hull, T. H., Balka, D. S., & Miles, R. H. (Eds.). (2009). *A guide to mathematics coaching: Processes for increasing student achievement*. Thousand Oaks, CA: Corwin Press.

Yopp, D., Burroughs, E. A., Luebeck, J., Heldema, C., Mitchell, A., & Sutton, J. (2011). How to be a wise consumer of coaching. *Journal of Staff Development*, 32(1), 50–53.

Cognitive Coaching

Costa, A. L., & Garmston, R. J. (1994). *Cognitive coaching: A foundation for renaissance schools*. Norwood, MA: Christopher-Gordon Publishers.

Peer Coaching

Joyce, B. R., & Showers, B. (2002). *Student achievement through staff development*. Alexandria, VA: Association for Supervision and Curriculum Development.

Showers, B., & Joyce, B. R. (1996). The evolution of peer coaching. *Educational Leadership*, 53(6), 12–16.

Coaching in the Early Childhood Setting

Artman-Meeker, K., Fettig, A., Barton, E. E., Penney, A., & Zeng, S. (2015) Applying an evidence-based framework to the early childhood coaching literature. *Topics in Early Childhood Special Education*, 35(3), 183–196.

Kucharczyk, S., Shaw, E., Smith Myles, B., Sullivan, L., Szidon, K., & Tuchman-Ginsberg, L. (2012). *Guidance and coaching on evidence-based practices for learners with autism spectrum disorders*. Chapel Hill, NC: University of North Carolina, Frank Porter Graham Child Development Institute, National Professional Development Center on Autism Spectrum Disorders.

Snyder, P. A., Hemmeter, M. L., & Fox, L. (2015). Supporting implementation of evidence-based practices through practice-based coaching. *Topics in Early Childhood Special Education*, 35(3), 133–143.

Snyder, P., Hemmeter, M. L., Meeker, K. A., Kinder, K., Pasia, C., & McLaughlin, T. (2012). Characterizing key features of the early childhood professional development literature. *Infants and Young Children*, 25(3), 188–212.

Snyder, P. A., Denney, M. K., Pasia, C., Rakap, S., & Crowe, C. (2011). Professional development in early childhood intervention: Emerging issues and promising approaches. In C. Groark (Series Ed.) & L. A. Kaczmarek (Vol. Ed.), *Early childhood intervention: Shaping the future for children with special needs and their families: Vol. 3* (pp. 169–204). Santa Barbara, CA: Praeger/ABC-CLIO.

Tout, K., Isner, T., & Zaslow, M. (2011). *Coaching for quality improvement: Lessons learned from quality rating and improvement systems (QRIS)*. (Research Brief). Washington, DC: Child Trends.

Behavioral Coaching, Sometimes Referred to as Behavioral Consultation

- Becker, K. D., Darney, D., Domitrovich, C., Keperling, J. P., & Jalongo, N. S. (2013). Supporting universal prevention programs: A two-phased coaching model. *Clinical Child and Family Psychology Review, 16*(2), 213–228.
- Bradshaw, C. P., Pas, E. T., Goldweber, A., Rosenberg, M. S., & Leaf, P. J. (2012). Integrating school-wide positive behavioral interventions and supports with tier 2 coaching to student support teams: The PBIS*Plus* model. *Advances in School Mental Health Promotion, 5*(3), 177–193.
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CONTRIBUTORS TO EFFECTIVE COACHING: IMPROVING TEACHER PRACTICE & OUTCOMES FOR ALL LEARNERS

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For additional information regarding content, please contact *Ask the NCSI* at <https://ncsi.wested.org/ask-the-ncsi>. *Ask the NCSI* is a research and information service provided by the National Center for Systemic Improvement (NCSI). *Ask the NCSI* is intended to support states to (1) obtain information about evidence-based practices; (2) develop, implement and evaluate State Systemic Improvement Plans (SSIPs); (3) learn about practices being implemented in other states; and (4) find out what current research says about “what works” to improve results for children with disabilities.

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We look forward to hearing from you!

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