

Using Implementation Checklists to Reinforce the Use of Child-Focused Intervention Strategies



Laurie Dinnebeil, PhD

Margie Spino, PhD

William McInerney, PhD

University of Toledo

Sonja was preparing for her visit to the Hillcrest Child Development Center to see Nolan, a 3-year-old little boy on an individualized education program (IEP). Nolan attended Hillcrest full-time and was a member of Mr. David's class. Nolan had difficulties interacting appropriately with his peers. His teachers, David and Ellen, were frustrated with his behavior and had used (unsuccessfully, in Sonja's opinion) time-out to reduce his inappropriate behavior.

For the past month Sonja had been working with David and Ellen to help Nolan learn other, more appropriate ways of interacting with his peers. She had tried all of the ways she knew to help David and Ellen. For example, she had explained repeatedly that sending Nolan to the time-out chair did not appear to be working since Nolan's

DOI: 10.1177/1096250611407140
<http://yec.sagepub.com>
© 2011 Division for Early Childhood

“
 Critical to successful
 early childhood inclusion
 efforts are supports that
 must be in place to help
 general early childhood
 teachers who work with
 young children with
 disabilities.
 ”

behavior wasn't changing. She had discussed ways to help Nolan respond more appropriately to his peers' requests and had shared written information about using positive behavior support to help children interact more appropriately with peers. She had modeled specific teaching strategies such as constant time delay (Noonan & McCormick, 2006; Walker, 2008; Wolery, 2001) and positive reinforcement (Noonan & McCormick, 2006) that were effective in helping children like Nolan learn more appropriate social skills. She had developed social stories (Gray, 1994, 1995; Gray & Garand, 1993) that David and Ellen could read with Nolan. Although it seemed as if David and Ellen were interested in helping Nolan, Sonja was frustrated when she didn't see any results. She had asked David and Ellen to keep track of their intervention efforts and had even helped design a data collection form, but whenever she asked about what had happened during the week, David and Ellen both admitted that they just didn't have time to try out the strategies. At the end of last week's visit Sonja and David had touched on this difficulty and had agreed to talk about it in further detail during today's visit.

Sonja appreciated the fact that David was open to using a consultative approach in their work together (Dinnebeil, Pretti-Frontczak, & McInerney, 2009). In contrast, Sonja worked with a few teachers who demanded that she be the person who "worked on" IEP objectives during her itinerant visits. Early in their work together, both had agreed that it was important for all of Nolan's teachers to address his learning difficulties. David was committed to helping Nolan, but

from Sonja's perspective, there just didn't seem to be any follow-through. Although David seemed as if he understood what he needed to do after Sonja explained the intervention strategies she recommended, maybe he didn't understand. Sonja knew how he felt—she had experienced that herself when trying to use her family's new digital TV features. Last night she had given up trying to watch the DVD she had rented. Her husband was usually the person who set up the DVD, and although he had patiently explained what Sonja needed to do, she had never really caught on even though it seemed simple enough when he was showing her. As a result, Sonja watched DVDs only when her husband was around to set them up! Maybe David and Ellen were having the same problem that Sonja had—even though Sonja had explained how to use the strategies and had even shown them how to do it—maybe they couldn't use the strategies independently yet. To solve this problem, Sonja wondered if she could develop some type of checklist or "cheat sheet" that David and Ellen could rely on when Sonja wasn't around. If the checklist was simple enough, it could help David and Ellen remember what to do to help Nolan. And, Sonja thought, perhaps a checklist would help her remember how to use that darn DVD player!

Critical to successful early childhood inclusion efforts are supports that must be in place to help general early childhood teachers who work with young children with disabilities (Division for Early Childhood, 2009). Early childhood teachers like David and Ellen want to do what is best for

children like Nolan. Although they are committed to preparing all of the children in their class to be successful learners, they sometimes lack the knowledge and skills necessary to do that. Itinerant specialists like Sonja work as early childhood consultants to help their general education partner teachers address children's IEP goals and objectives in the absence of the itinerant early childhood special education (ECSE) teacher.¹ These specialists understand the importance of using naturalistic intervention strategies that can be embedded in children's everyday experiences (Grisham-Brown, Hemmeter, & Pretti-Frontczak, 2005; McWilliam & Casey, 2008; Noonan & McCormick, 2006). They understand that young children learn best through distributed practice opportunities that occur throughout the day and across the week (Dinnebeil & McInerney, 2011) and that to afford children these opportunities, itinerant specialists must help other adults, including parents and general early childhood teachers, to provide learning opportunities that are embedded in daily routines that occur throughout the day and across the week.

The purpose of this article is to illustrate how itinerant specialists (service providers who provide special education or related services in community-based early childhood settings) can support the implementation of child-focused intervention strategies by classroom teachers, parents, and caregivers between itinerant visits. Implementation checklists provide step-by-step instruction to users and, when paired with peer coaching opportunities, can provide a

valuable support to parents, general education teachers, and caregivers. A detailed case scenario illustrates how itinerant specialists can use implementation checklists in an inclusive early childhood setting.

Peer coaching (Donegan, Ostrosky, & Fowler, 2000; Hanft, Rush, & Shelden, 2004) is a highly effective strategy to help adults learn to correctly use and implement intervention strategies, but itinerant ECSE professionals can use it only during itinerant ECSE visits. Itinerant specialists are not available between visits to prompt the correct use of an intervention strategy or provide performance feedback regarding use of that strategy. Are there strategies that teachers like Sonja can use that will provide help and support *between* itinerant visits? In this article, we describe the development and use of implementation checklists that break down intervention strategies into discrete, sequential steps that are easy for adults to follow and use in the itinerant specialist's absence.

The Importance of Implementation With Fidelity

The integrity of an evidence-based intervention strategy is dependent on its full and correct implementation, that is, the degree to which it is implemented as intended or, in other words, with fidelity. Incorrect or partial implementation can compromise the result of the strategy and lead to incorrect or erroneous decisions about its efficacy. Wilkinson's (2006) description of the "consult and hope" strategy (p. 426) for

“
One way to support the
correct implementation of
intervention strategies is
through the use of
checklists.
”

consultants is an apt expression of the frustration some feel when discussing the nature of behavioral consultation in the schools. Those who provide specialized services by consulting with other teachers or parents instead of directly providing those services must rely on that individual's capacity to deliver and report on the success of an intervention. Sometimes those individuals lack the ongoing support necessary to ensure that child-focused interventions are delivered with fidelity. One way to support the correct implementation of intervention strategies is through the use of checklists or other protocols that can provide step-by-step instructions or reminders about how to use a specific strategy (Gomez, Walis, & Baird, 2007). In addition, these checklists can serve as progress-monitoring tools for adults learning to use an intervention as well as a tool to monitor children's progress.

Characteristics of Effective Checklists

Terms and Language

If an implementation checklist is going to be effective in helping others use an intervention strategy appropriately, then it must be constructed with precision. The terms and language used in the checklist must describe precise steps that users can follow to implement an intervention, but they also must be simple enough for people without a great deal of special education content knowledge to use. It is important for itinerant specialists to make sure that users understand all of the terms and language that

appear in a checklist. For that reason, they should avoid using checklists that contain specialized jargon or technical terms. For example, using the word *contingent* to indicate when a child receives reinforcement is technically correct, but many people may not understand that it means “dependent on.” *Successive approximation* is another term that is not part of most people's daily vocabulary—itinerant specialists may need to substitute other words that checklist users understand. Sometimes it can be helpful to check websites designed specifically for parents or family members of individuals with disabilities since they limit the use of jargon or technical terms. Itinerant specialists may also consider a “validity check” with an ECE partner to make sure that all terms are understandable.

Even as itinerant specialists must ensure that terms and language in the checklist are easily understandable, they also must be sure that the terms and language appearing in the checklist are correct and accurately reflect procedural components of the intervention. Just relying on a thesaurus might yield misleading results. For example, although a thesaurus search for *approximation* might yield the word *estimate*, substituting *estimate* for *approximation* is not technically correct since *approximation* in this sense would refer to a learner's more accurate attempts to engage in a targeted behavior or use a skill.

Procedural Components

An important feature of an implementation checklist is that it contains and describes the essential steps to use an intervention

correctly. Research evidence supporting the use of a particular strategy assumes that the procedural components or steps involved in implementing the strategy are followed correctly (Halle, 1998). Consequently, useful implementation checklists are those that correctly outline the procedural components or “essential steps,” as well as the order in which they should occur. Leaving out a step will lead to incorrect implementation. For example, an essential component of many naturalistic intervention procedures is “following the child’s lead” (Rule, Losardo, Dinnebeil, Kaiser, & Rowland, 1998). That is, if a naturalistic intervention is to be effective, then it must be based on something that interests the child. Therefore, it is essential that a checklist for using a naturalistic intervention begin with “determine what the child is interested in.” Leaving out this step will threaten the efficacy of a naturalistic intervention and may lead itinerant specialists, and those with whom they work, to incorrect conclusions about the efficacy of an intervention.

Contextualized or Decontextualized?

Implementation checklists can be designed for specific situations or for use broadly across routines and settings. Decontextualized checklists, or those that lack references to setting- or person-specific variables, can be useful for itinerant specialists since they can be used across settings. This can also be useful if the target skill is one that should be used across settings or situations. However, at times, parents or

caregivers might need help with a specific routine. In that case, it is helpful to tailor an implementation checklist for a specific situation. Itinerant specialists should consider the needs of the adult who will be using the checklist as well as the targeted skill or outcome to determine how to contextualize the checklist.

For example, itinerant specialists can construct implementation checklists for helping another adult use correspondence training (Baer, 1990; Bevill-Davis, Clees, & Gast, 2004) to help a child follow through on a planned event. That checklist might refer to a specific routine of the day (e.g., circle time) during which the adult prompts the child to state his or her intentions about engaging in a particular behavior (e.g., write a story in the writing center). This is an example of a *contextualized* checklist since it would be important to use only during this specific routine. By removing any reference to a specific routine, the checklist becomes decontextualized and could be appropriate to use across a variety of routines (e.g., circle time, transitions, snack). It takes time to develop useful implementation checklists. Making all checklists as versatile as possible increases their utility and the likelihood that they will be used.

Monitoring Function of a Checklist

Another feature of an effective implementation checklist is the way in which it allows users to consistently keep track of the child’s response to an intervention as well as the degree to which the user

appropriately follows each step in the checklist. For this reason, it is important for the checklist to include space for recording data about the nature of the child's response to the intervention as well as an option to note the implementation of each step in the checklist. Itinerant specialists must work with checklist users to construct progress-monitoring strategies that yield helpful data and inform the process of instruction. These checklists should feature progress-monitoring strategies that are practical and reasonable to use within the context of a busy day. For example, although it may be useful to have detailed information about the *quality* of a child's response to a prompt, it may not be reasonable to expect that the checklist user record detailed information. It may be much more realistic to expect that the checklist user record either the presence or the absence of a behavior. During some itinerant visits, specialists can observe or work with the child to determine the quality of a response and may modify the checklist accordingly.

Using a Checklist to Help David and Ellen With Nolan

During the time she had on Wednesdays for planning, Sonja used her computer and an old college text to develop a checklist that David and Ellen could use. The checklist outlined the steps for using constant time delay to help Nolan appropriately ask for an object from a peer. Figure 1 depicts the implementation checklist that Sonja

developed. Sonja made sure that the checklist had space for noting implementation of each step of the intervention as well as space for recording Nolan's response. She showed the checklist to a few colleagues to make sure that it was complete and accurate before sharing it with David and Ellen. She also sent David an email to make sure that he would have time during her next visit to work with her using the checklist.

During her next visit to Nolan's classroom, Sonja and David used the checklist in the following way:

1. *She showed David the checklist, asking him to read through it to make sure that he was familiar with all of the terms and language. She explained that one checklist would be completed each time they practiced the strategy (i.e., for one trial) and that it be used to record both David's and Nolan's performance. For both the adult's and child's performance, one of three symbols would be recorded. A + indicated that the individual had demonstrated the correct response, a - indicated that the individual had demonstrated an incorrect response, and a 0 indicated that the individual had not responded at all.*
2. *She asked David to use the checklist to make sure he used all of the steps in the constant time delay strategy correctly with Nolan.*
3. *After she demonstrated the strategy with Nolan (and David checked off each of the steps), they reviewed the checklist so that David could give Sonja feedback on her use of each of the*

Figure 1
Example of an implementation checklist for constant time delay strategy

Implementation Checklist for Constant Time Delay

Target Skill: Ask peer for object

Constant Time Delay Strategy: A fixed amount of time (such as 3-5 seconds) is given between an instruction and a prompt. The prompt that is chosen is the least intrusive prompt that results in the correct response almost every time it is used. This strategy is used to reduce the number of errors a child makes while learning a new skill.

ECSE teacher: _____
 Date: _____
 ECE partner teacher: _____
 Context (e.g., going outside): _____

Coding:

- + = Demonstrated Desired Response
- = Demonstrated Incorrect Response
- O = Demonstrated No Response

ECE TEACHER		CHILD	
ECE Teacher's Intervention Steps	ECE Teacher's Performance	Child's Correct Responses	Child's Performance
1. Observe child with peers		Child appropriately asks peer for object	
2. If child appropriately asks peer for object, give positive and descriptive praise (e.g., "Good job, Nolan. You asked Gwen for the car.")			
3. If child responds incorrectly or does not respond, ignore the child's response AND get child's attention (e.g., "Nolan," touch child's arm)		Child looks at teacher	
4. Give initial verbal prompt to child (e.g., "Ask Gwen for the car." Or "Say, 'car please.'" and point to other child.			
5. Wait 3-5 seconds. Count to self, "1000-1, 1000-2, 1000-3," etc.		Child asks other child for object (e.g., "Car please.")	
6. If child responds correctly, immediately give positive and descriptive praise (e.g., "Good job, Nolan. You asked Gwen for the car.")			
7. If child responds incorrectly or does not respond, ignore the child's response AND give the verbal prompt again (e.g., "Say, 'car please.'").			
8. Wait 3-5 seconds. Count to self, "1000-1, 1000-2, 1000-3," etc.		Child asks other child for object (e.g., "Car please.")	
9. If child responds correctly, immediately give positive and descriptive praise (e.g., "Good job, Nolan. You asked Gwen for the car.")			
10. If the child responds incorrectly or does not respond, say for example, "Nolan, you did not ask for the car. No car."			

Comments

“
Implementation checklists
provide a way to support
the use of a specific,
child-focused intervention
between itinerant visits.
”

steps. This also gave Sonja another opportunity to make sure that she and David had a mutual understanding of the components of the strategy and the order in which they should be used.

4. They then switched roles. This time David used the strategy while Sonja watched and documented David's implementation of each step of the strategy. They debriefed again, so that Sonja could give David specific feedback about his use of the strategy and David could ask questions.
5. David did have a question—a question about the amount of time he should wait before he prompted Nolan to respond correctly. Because he was still unclear about implementing time delay, Sonja once again demonstrated the strategy, this time emphasizing the length of “wait time” (3–5 seconds; Wolery et al., 1992) before she prompted Nolan. She and David talked about it after she had modeled the length of time between cuing Nolan to respond and prompting his correct response.
6. They switched roles again, with David working with Nolan and Sonja watching and documenting David's use of the strategy with the checklist. She also noted Nolan's response on the checklist (i.e., + indicating that he responded appropriately).
7. Once David and Sonja were confident in David's use of the strategy, they discussed a specific time during Nolan's day when David would use the strategy. Both acknowledged that although

it made sense to use the strategy during snack time, this time of day was far too busy to add another responsibility. Instead, they both decided that “center time” was a less structured time of the day when David might indeed have time to use the strategy. Not only was it a good time for David to use the strategy, but embedding it into Nolan's interactions with his peers would help Nolan generalize his ability to request an object from a peer. They both decided that embedding this intervention once during center time, each day of the week, was a reasonable expectation and would allow both David and Sonja to see Nolan's progress. The visit ended with both feeling hopeful about David's ability to help Nolan.

8. During Sonja's next visit, she and David reviewed the notes David had made on the checklist. Just to make sure that David still understood the steps in the process she, once again, asked him to demonstrate use of the strategy while she observed him. They both were pleased when Sonja determined that David was following each step of the strategy appropriately. Furthermore, he reported that after using the checklist for a week, he felt as though he knew each step and did not need the checklist to remind himself of the steps—he could now use it just to monitor Nolan's progress. Sonja made a mental note to expand her use of implementation checklists to other children

and adults with whom she worked. That night she asked her husband to help her develop a checklist (or a “cheat sheet”) about how to use the DVD player. A week later, after using the DVD checklist a few times, she slipped a DVD into the DVD player, switched the TV to DVD mode using the remote, and enjoyed watching a movie without having to ask her husband for help and almost without referring to the checklist!

Conclusion

Itinerant specialists, whether teachers or related services professionals, are often challenged in finding resources to use with partners that are practical, easy to use, and effective. Implementation checklists provide a way to support the use of a specific, child-focused intervention between itinerant visits, thereby increasing the likelihood that children will continue to make progress toward meeting individualized family service plan or IEP goals and objectives. We used an early childhood special educator as an example. Related services professionals, such as occupational therapists, could also develop an implementation checklist related to the steps in buttoning a smock or shirt. The classroom teacher could then “see” how to use a strategy of distal and proximal prompting (Noonan & McCormick, 2006) to

assist the child in learning that skill. Other related service examples include the use of a micro switch in a literacy activity, in conjunction with prompting and time delay strategies, and the use of modified print utensils and prompting strategies to support improved preprinting or keyboarding skills.

Two excellent sources for information about procedural components of intervention strategies are the Autism Internet Modules (AIM) available through the Ohio Center on Autism and Low Incidence Conditions (www.ocali.org) and the Interactive Collaborative Autism Network (www.autismnetwork.org). Both are designed for people who work with individuals with autism spectrum disorder; the intervention strategies reviewed at both sites, however, are strategies that work with individuals with a variety of exceptional learning needs. Training modules focus on evidence-based practices. AIM also provides detailed implementation checklists that provide users with step-by-step guidelines for using an intervention. As suggested above, itinerant professionals may also create implementation checklists by reviewing the steps or components of an intervention and designing a checklist featuring these components. Just as the “cheat sheet” Sonja’s husband designed helped her to operate the DVD player, so will implementation checklists provide the extra support that partner teachers and/or parents need to help children between itinerant visits.

Note

1. The term *itinerant specialist* refers to anyone (e.g., early interventionists, related service providers, early childhood special education teachers) with specialized knowledge who works with general education teachers to support early childhood inclusion.

References

- Baer, R. A. (1990). Correspondence training: Review and current issues. *Research in Developmental Disabilities, 11*, 379-393.
- Bevill-Davis, A., Clees, T. J., & Gast, D. L. (2004). Correspondence training: A review of the literature. *Journal of Early and Intensive Behavior Intervention, 1*, 13-26.
- Dinnebeil, L. A., & McInerney, W. (2011). *A guide to early childhood itinerant service delivery*. Baltimore, MD: Brookes.
- Dinnebeil, L. A., Pretti-Frontczak, K., & McInerney, W. (2009). A consultative itinerant approach to service delivery: Considerations for the early childhood community. *Language, Speech, and Hearing Services in Schools, 40*, 435-445.
- Division for Early Childhood. (2009). *DEC position on inclusion*. Missoula, MT: Author.
- Donegan, M., Ostrosky, M., & Fowler, S. (2000). Peer coaching: Teaching supporting teachers. *Young Exceptional Children, 3*(2), 9-16.
- Halle, J. (1998). Fidelity: A crucial question in translating research to practice. *Journal of Early Intervention, 21*, 294-296.
- Hanft, B. E., Rush, D. D., & Shelden, M. L. (2004). *Coaching families and colleagues in early childhood*. Baltimore, MD: Brookes.
- Gomez, C. R., Walis, S., & Baird, S. (2007). On the same page: Seeking fidelity of intervention. *Young Exceptional Children, 10*(4), 20-29.
- Gray, C. A. (1994). *The new social story book*. Arlington, VA: Future Horizons.
- Gray, C. A. (1995). Teaching children with autism to "read" social situations. In K. Quill (Ed.), *Teaching children with autism: Strategies to enhance communication and socialization* (pp. 219-241). Albany, NY: Delmar.
- Gray, C. A., & Garand, J. (1993). Social stories: Improving responses of students with autism with accurate social information. *Focus on Autistic Behaviour, 8*, 1-10.
- Grisham-Brown, J., Hemmeter, M. L., & Pretti-Frontczak, K. (2005). *Blended practices for teaching young children in inclusive settings*. Baltimore, MD: Brookes.
- McWilliam, R. A., & Casey, A. M. (2008). *Engagement of every child in the preschool classroom*. Baltimore, MD: Brookes.
- Noonan, M. J., & McCormick, L. (2006). *Young children with disabilities in natural environments*. Baltimore, MD: Brookes.
- Rule, S., Losardo, A., Dinnebeil, L. A., Kaiser, A., & Rowland, C. (1998). Research challenges in naturalistic intervention. *Journal of Early Intervention, 21*, 283-293.
- Walker, G. (2008). Constant and progressive time delay procedures for teaching children with autism: A literature review. *Journal of Autism and Developmental Disorders, 38*, 261-275.
- Wilkinson, L. A. (2006). Monitoring treatment integrity: An alternative to the "consult and hope" strategy in school-based behavioural consultation. *School Psychology International, 27*, 426-438.
- Wolery, M. (2001). Embedding constant time delay procedures in classroom activities. In M. Ostrosky & S. Sandall (Eds.), *Teaching strategies: What to do to support young children's development* (Young Exceptional Children Monograph Series No. 3, pp. 81-90). Missoula, MT: Division for Early Childhood of the Council for Exceptional Children.
- Wolery, M., Holcombe, A., Cybriwsky, C., Doyle, P. M., Schuster, J. W., Ault, M. J., & Gast, D. L. (1992). Constant time delay with discrete responses: A review of effectiveness and demographic, procedural, and methodological parameters. *Research in Developmental Disabilities, 13*, 239-266.