

Integrating Intensive Intervention Into Special Education Services: Guidance for Special Education Administrators

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- **Special education administrators at both the district and school level are serving in critical roles that uniquely position them to improve academic and behavioral outcomes of students with disabilities by ensuring the special education teachers under their supervision are prepared to deliver an evidence-based form of intensive intervention—data-based individualization.**
- **This manuscript reports lessons learned from the National Center on Intensive Intervention’s first 5 years of providing technical assistance to 26 schools. School staff received training and ongoing support to integrate intensive intervention into their service delivery models.**
- **Lessons learned focus on establishing a core implementation team, examining the current state of intervention efforts, starting with a focused pilot project, targeting professional development efforts, and establishing documented procedures and intervention plans.**
- **Guidance for special education administrators to get started with the integration of data-based individualization into special education services is provided.**

Key words: Intensive Intervention, Data-Based Individualization, Special Education, Leadership, Administrators.

Despite advances in the education of students with disabilities across the first 40 years of implementation of the Individuals with Disabilities Education Act (IDEA), outcomes remain poor. Data on students with disabilities indicate that only 16% of fourth graders and 8% of eighth graders are proficient in mathematics and only 12% of fourth graders and 8% of eighth graders are proficient in reading (U.S. Department of Education, Institute of Education Sciences, & National Center for Education Statistics,

2015). Additionally, 33% of students with disabilities have had a disciplinary problem at school (Wagner et al., 2003), 25% will drop out before graduation, and 80% are predicted to be unemployed or underemployed after school completion (Wagner, Kutash, Duchnowski, Epstein, & Sumi, 2005). Clearly, there is an urgent need for schools to recommit to efforts to remediate these poor outcomes.

Fortunately, special education administrators are well positioned to direct system-wide reform efforts

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to ensure that special education teachers are able to increase the educational achievement of students with disabilities (Boscardin, 2007). One such approach is intensive intervention, a framework for ensuring that special education is, as Zigmond (1997) described,

...first and foremost, instruction focused on individual need...[that] is carefully planned...is intensive, urgent, relentless, and goal directed... [and] is empirically supported practice, drawn from research...[involving] monitoring each student's progress...[and] changing instruction when the monitoring data indicate that sufficient progress is not being made. (pp. 384-385)

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What is NCII?

The Office of Special Education Programs (OSEP) in the U.S. Department of Education funded NCII in 2011. NCII's mission during the first 5 years of funding was to build the capacity of local education agencies (LEAs) to support schools, practitioners, and other stakeholders in the implementation of intensive intervention for students with severe and persistent reading, mathematics, and/or behavioral needs. Initial work involved identifying five districts with a history of successfully addressing the academic and behavioral needs of students with disabilities. For each of the districts, the researchers conducted site visits, interviews, and focus groups with personnel. Data from these sources indicated several commonalities across the targeted districts (see Gandhi, Scala, Vaughn, Danielson, & Selitano, 2015).

NCII used the information gathered in the targeted schools along with recommendations from experienced special education researchers to develop a TA model. NCII then recruited 26 schools that received TA and support to increase the outcomes of students with disabilities. The purpose of this manuscript is to provide special education administrators with an overview of the Center's work, to highlight a set of lessons learned from the TA experiences in schools working with NCII, and to provide guidance on integrating intensive intervention into special education services. First, we provide a description of NCII's approach to intensive intervention and summarize the Center's initial TA efforts. Next, we describe our data collection methods and outline the lessons learned from the implementation sites. Then, we offer guidance for special education administrators who are interested in integrating intensive intervention into special education services.

What is NCII's Approach to Intensive Intervention?

Students with disabilities who have demonstrated inadequate response to previous efforts to remediate severe and persistent academic and behavior difficulties are in need of interventions that are more intensive and individualized (D. Fuchs & Fuchs, 2015; Torgesen et al., 2001). Although there is not a precise assessment of the number of students who need intensive intervention, researchers have estimated that between 3 to 5% of the general population will demonstrate inadequate response to remediation efforts (D. Fuchs, Fuchs, & Vaughn, 2014). The percentage of students with disabilities who need intensive intervention is likely higher. For example, D. Fuchs and Fuchs (2015) estimate that as many as 25 to 50% of students with learning disabilities do not benefit from current instructional interventions.

NCII's approach to intensive intervention is data-based individualization (DBI). DBI is a systematic method for intensifying interventions by using data to determine when and how to make adaptations that will enhance the likelihood of positive student outcomes (D. Fuchs, McMaster, Fuchs, & Al Otaiba, 2014; NCII, 2013). DBI is rooted in research conducted on data-based program modification and experimental teaching in the late 1970s (Deno & Mirkin, 1977). Twenty-five years of

experimental research demonstrates that educators who implement DBI produce stronger student outcomes compared to those who do not (L. S. Fuchs & Fuchs, 1986; D. Fuchs, Fuchs, & Stecker, 2010; D. Fuchs et al., 2014).

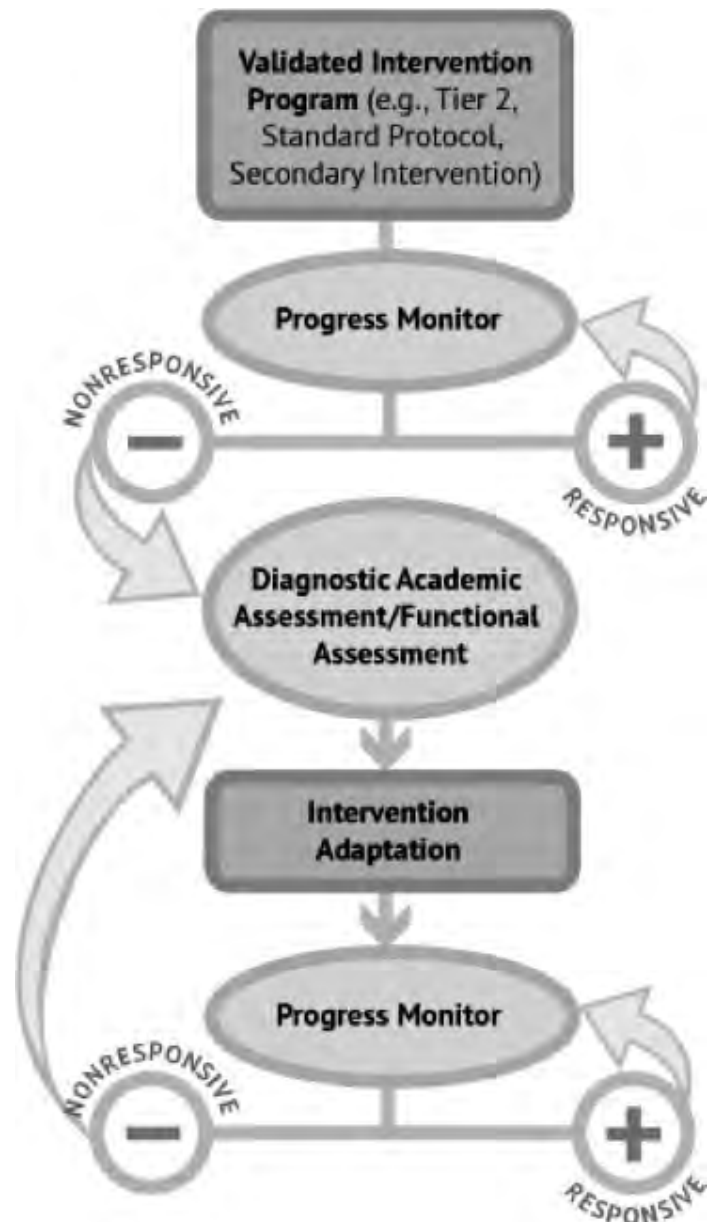
DBI can be incorporated into the most intensive tier of schools' Response to Intervention (RTI) or Multi-Tiered Systems of Support (MTSS) models to meet the needs of students who fail to respond to less intensive intervention (e.g., Tier 2). Nevertheless, it can also be integrated into the services provided to students with disabilities by special education teachers regardless of whether these services are explicitly tied to a school's RTI or MTSS model. For the purpose of this manuscript, we are focused on considerations for integrating DBI into special education services. Much of this information, though, is likely appropriate for school administrators in charge of other intervention services (e.g., RTI and MTSS).

Steps of the DBI Process. Figure 1 provides an overview of the DBI process (see Kern & Wehby, 2014; Lemons, Kearns, & Davidson, 2014; Powell & Stecker, 2014, for applied DBI examples). The first step is to select a *validated intervention program* that matches the student's needs and to implement this intervention in a more intensive way than prior instruction (e.g., preceding interventions implemented in special education or Tier 2). As most students in need of DBI have participated in previous remediation efforts, initial intervention implementation can be made more intensive than prior instruction by reducing group size, increasing the duration or frequency of intervention sessions, or selecting an intervention program that addresses foundational skill deficits not targeted by previous intervention programs.

Next, the special educator should select a valid, reliable *progress monitoring* measure to frequently (e.g., weekly) assess the student's response to the intensified validated intervention program (Deno, 1985). NCII provides academic and behavioral tools charts for evaluating and selecting appropriate progress monitoring tools (<http://www.intensiveintervention.org/chart/progress-monitoring>). The special educator should set a goal for the student to reach by the end of the intervention period and graph data to evaluate student progress towards meeting the goal.

If the student's data indicate inadequate response (e.g., four or more data points below the goal line),

Figure 1. The DBI process. From *Data-based individualization: A framework for intensive intervention* by the National Center on Intensive Intervention, 2013 (<http://www.intensiveintervention.org/resource/data-based-individualization-framework-intensive-intervention>). Copyright 2013 by the National Center on Intensive Intervention. Reprinted with permission.



the special educator should administer a *diagnostic academic assessment or functional assessment* and use the information gained to guide *intervention adaptation*. The aim is to make changes to the intervention that will improve the student's response. The adaptations should be integrated into the intervention and accompanied by continued progress monitoring. The cycle of evaluating response and integrating

additional adaptations should be an ongoing process that is implemented until a student is making adequate progress to achieving the intended academic or behavioral outcome. For many students with disabilities, this process will likely be needed across academic years and possibly throughout students' academic careers (Allor, Mathes, Roberts, Cheatham, & Al Otaiba, 2014; Vaughn et al., 2015).

What was NCII's TA Model?

During the first funding cycle, NCII provided three levels of TA to relevant stakeholders. *Intensive TA* involved ongoing support to staff at 26 schools (24 elementary and two middle schools) representing 12 LEAs in four states (Michigan, Missouri, Rhode Island, and Minnesota). All schools and districts received training in academic and/or behavioral content and also received approximately 10 hours of coaching a month per district during the school year. A total of 26 coaches worked across the 12 LEAs between 2012–2017, actively providing support to the NCII school and district teams in areas including but not limited to academic and behavioral progress monitoring, intervention design, implementation fidelity, capacity building, and scale-up. Additional TA supports included the completion of annual TA plans that formed the basis of school and district goals related to DBI implementation for a given academic school year.

Targeted TA involved responding to periodic targeted TA requests from across the country for trainings, conference presentations, webinars, and consultation. *Universal TA* involved the broad dissemination of products and resources through the NCII website (www.intensiveintervention.org). NCII originally developed many of these products for use with the intensive TA sites, but then adapted them for use by a broader audience. Examples include DBI training modules (accompanied by coaching materials, handouts, guides, and extension activities), materials to use at student meetings, lesson plans and materials, a DBI implementation fidelity rubric, and tools charts of assessments and intervention programs.

How Were These Data Collected?

The purpose of this manuscript is to provide guidance to special education administrators at both the district and school level who are considering

integrating DBI into special education services. The data used to inform this guidance came from school districts that received intensive TA during the first 5 years of NCII. At the end of each academic year, NCII conducted "pulse check" visits at each campus. During these visits, two NCII staff members or advisors conducted interviews with members of the schools' leadership and staff to discuss the implementation of DBI and set goals for the next academic year. During the meetings, interviewers completed a DBI implementation rubric (<http://www.intensiveintervention.org/resource/dbi-implementation-rubric-and-interview>) to assess the school's progress with implementing DBI and to identify goals for additional TA. NCII staff or advisors submitted a report summarizing the visit, the rubric ratings, and the recommendations for the upcoming year to NCII.

A team of three coders independently reviewed the pulse check reports from each project year. They identified examples of successful DBI implementation and potential facilitators of these successes. The team compiled the examples and prioritized those believed to have the greatest impact on DBI implementation success. For each campus or district in which a success was identified, NCII staff identified one or more school personnel who would be able to provide the team with additional detail on the successes.

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The NCII research team developed structured interviews for each school or district to elicit additional detail on the success story and to ask the school and district personnel to provide guidance that could be useful for school personnel interested in DBI implementation. Two members of the team conducted each recorded interview by phone. Team members then listened to the interviews independently to provide additional descriptive information on the success stories. The team conducted a synthesis of the pulse check data and interview notes to generate the guidance on implementing DBI that is presented next.

What Lessons Were Learned from NCII's Technical Assistance?

Across the DBI implementation sites, we identified five general lessons that illustrate the facilitators that school and district staff frequently identified as contributing to their successes implementing DBI. We summarize each of these lessons next. We conclude with specific steps that special education administrators can follow to get started with DBI implementation.

Lesson 1: Support from Leadership Is Essential for Successful Implementation of DBI

The first essential element to foster success was strong support from school or district leaders to integrate DBI into intervention services for students with severe and persistent learning and behavioral difficulties. Across the intensive TA sites, people in various leadership roles provided this support, with special education directors, principals, RTI/MTSS coordinators, curriculum coordinators, and school psychologists leading DBI efforts.

Many staff members involved in intensive TA indicated that leadership support at both the school and district levels was important and led to greater staff buy-in. District-level leaders ensured that district resources were available to support DBI and that the DBI efforts were explicitly connected to other district initiatives (i.e., RTI, MTSS). However, staff members also shared that a strong school-level leader was most able to provide daily support to ensure consistent, high-quality DBI implementation. Further, many indicated that when both special and general education leaders supported DBI integration, this led to broader staff buy-in, greater collaboration, and more creative use of resources to meet the needs of students. Interviewees also believed supportive leadership facilitated successful integration of DBI by encouraging staff to commit to ongoing improvement efforts. The Director of Student Support Services in

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one district reflected upon the important role supportive leaders play. She explained,

Get ready because it is hard work. Don't think there is anything in this process that does not challenge your intellect ...and professional knowledge. You need a level of commitment that even when it gets difficult, you will not sacrifice the time you've set aside or the direction that you've given in terms of implementation of intervention. This has to be a priority ... The administrator has to be able and willing to commit resources ... in order to be able to maintain fidelity to the plan.

In this district, the special education administrator was the driving force that motivated her teachers to take on the DBI challenge. She provided focused, encouraging leadership to support them along the way. Special education administrators should ensure that district- and school-level leaders are engaged and committed to implementing DBI to increase the likelihood of success.

Lesson 2: Solid Foundations Allow School Staff to Focus Efforts on DBI

Many personnel who participated in interviews indicated that starting the DBI process with a validated intervention program (e.g., standard protocol) allowed teachers to devote more efforts to intensification and individualization. Starting with an established program that was implemented in a more intensive manner than previous remediation efforts was less burdensome and more efficient than designing interventions from scratch. Special educators who are already implementing validated intervention programs can use these as starting points to begin intensification. In schools where special education services are linked to RTI and MTSS systems, ensuring that Tiers 1 and 2 include high quality instruction from validated intervention programs may allow special educators to focus on a smaller group of students who truly need individualized instruction.

Although interviewees expressed the desire to build a strong foundation upon which DBI could be added, we do not believe special educators should delay DBI implementation until Tiers 1 and 2 are functioning optimally. Special education administrators must ensure students with disabilities have access to the schools' most intensive interventions. Delaying access until RTI/MTSS

systems are fully in place denies these students the free, appropriate public education guaranteed to them by IDEA. Special education administrators should ensure that special educators receive DBI-focused professional development and ongoing support. Infusing DBI strategies into special education planning, services, and Individualized Education Programs (IEPs) will increase the likelihood that students with disabilities receive intensive interventions that address their academic and behavioral goals.

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Lesson Three: Starting Small and Moving Forward One Step at a Time Facilitates Success

Staff at schools who focused initial DBI implementation on a small number of students who had demonstrated poor response to previous remediation efforts believed that this deliberately focused approach to starting enabled their success. Many indicated that being realistic about current challenges, available resources, and personnel helped them design a feasible plan for integrating DBI into their intervention systems. In a majority of the intensive TA sites, school staff initially implemented DBI with only four to six students. School staff reported that this small-scale implementation allowed them to concentrate on understanding the DBI process and learning how to integrate the process into their instruction. School leaders expressed that not overcommitting in early stages of DBI implementation was critical to ensuring that teachers were not overwhelmed or frustrated and set the stage for initial successes. As one RTI Coordinator expressed, "Take your time through the stages of implementation. Focus on that exploration first. Make sure you understand why you're doing this."

Lesson Four: Formalizing Procedures Through Standardized Protocols Helps Ensure Ongoing DBI Implementation

Several school districts established protocols (e.g., scripted meeting agendas) to systematize DBI procedures. A common concern underscored by one principal was that, "when two or three people that spearhead a particular change or initiative then no longer are involved with it ... things kind of fall by the wayside." Creating durable systems maintains the sustainability of the DBI process even if there is staff turnover. Relatedly, schools indicated the need to repeat professional development sessions across years to maintain returning staff knowledge and bolster new staff understandings.

School personnel also indicated that establishing guidelines for implementing DBI (e.g., how to determine which students would receive DBI and when adaptations would be implemented) helped schools sustain DBI processes even with staff changes. They emphasized that it is important to focus DBI meetings on instruction and adaptations, not solely on using data. They believed that DBI meetings should include time to talk about students' response to intervention and potential adaptations to make when that student demonstrated insufficient response. School personnel viewed this as another key to successful DBI implementation.

Lesson Five: Committing to Trust the Process Leads to Successful DBI Implementation

A theme consistent across a majority of our interviews was that implementing DBI posed various challenges, but persistence and commitment to the effort contributed to the success demonstrated at the end of the project. The primary point stressed by participating staff was that it is important to commit to implementing the DBI process for an extended period of time and to know that it will likely be bumpy along the way.

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The primary point stressed by participating staff was that it is important to commit to implementing the DBI process for an extended period of time and to know that it will likely be bumpy along the way. As one MTSS Coordinator summarized,

Data-based decision-making is not for wimps ... You really got to go in knowing that it's hard work ... to really look at the data ... Once you've made that commitment you can't just give up ... The only answer we've found so far is sometimes just going ahead and doing what we need to do and having then people look at the success.

Staff in many schools reported that this commitment to DBI implementation has paid off. An RTI coach described accomplishments at her school: "Teachers worked really hard ... [They] now look more at what they need to do to change instruction or new interventions instead of just looking at data ... they are better able to use data to plan for specific students."

Related to this, all personnel we spoke with believed that their schools made things work with outside-the-box thinking. Across the intensive TA sites, we saw numerous examples of creative approaches to balancing the goals of DBI with extant school schedules, personnel, and resources (e.g., cross-grade-level grouping of students in intervention and using trained teams of volunteers for universal screening). In sum, just as teachers use data to guide ongoing adaptations of interventions for students, school leaders were using data to guide ongoing improvement efforts to support and improve their teachers' abilities to implement DBI.

A Guide to Getting Started With DBI

Below, we outline one path for special education administrators who are interested in integrating DBI into special education services to follow and highlight various resources that can be used to support implementation. We believe that special education administrators who consider the lessons learned from NCII's efforts and follow the guidance presented next will be most likely to experience success with DBI.

Step One: Establish a Core DBI Team and Familiarize Team Members With DBI

The first step involves forming a team of individuals who will share responsibility for learning about DBI and developing an implementation plan. This team should include special education administrators at both the district and school levels and special educators who will be providing interventions. Related services personnel would also be highly valuable team members. If this effort is linked to

other school initiatives (e.g., RTI, MTSS), additional staff should also be involved.

Team members should familiarize themselves with the DBI framework prior to developing an implementation plan. We suggest that all team members first read *Data-Based Individualization: A Framework for Intensive Intervention* (http://www.intensiveintervention.org/sites/default/files/DBI_Framework.pdf), which provides an overview of intensive intervention and the core features of DBI. Next, we recommend that team members complete two modules on DBI developed through the IRIS Center at Peabody College of Vanderbilt University (<http://iris.peabody.vanderbilt.edu/>) in collaboration with NCII and the CEEDAR Center (<http://cedar.education.ufl.edu/>). The first module (<http://iris.peabody.vanderbilt.edu/module/dbi1/>) provides an overview of DBI and guidance on making adaptations to intensify and individualize instruction. The second module (<http://iris.peabody.vanderbilt.edu/module/dbi2/>) describes collecting and analyzing progress monitoring and diagnostic assessment data to inform the DBI process. It is important for team members to become knowledgeable about DBI components as a foundation for the next steps.

Step Two: Examine the Current State of the District or School to Facilitate Planning

One critical aspect of planning is to understand what infrastructure is currently in place that will support DBI implementation and to highlight potential areas of improvement. NCII has developed a module about the infrastructure needed to implement DBI to facilitate a planning discussion (<http://www.intensiveintervention.org/resource/getting-ready-implement-intensive-intervention-infrastructure-data-based-individualization>). If special education administrators are guiding this effort and the integration of DBI into special education services will be limited to only special education (i.e., not connected to RTI or MTSS), the forms may need to be slightly adapted.

NCII also has a more detailed set of evaluative tools, including the *DBI Implementation Interview* and *DBI Implementation Rubric* (<http://www.intensiveintervention.org/resource/dbi-implementation-rubric-and-interview>) to guide deeper analysis. The Rubric assesses strengths and

areas for improvement across five essential components of DBI: Systems Features, Data and Decision Making, Intervention, DBI Process, and DBI Evaluation. Teams can complete different ratings in reading, mathematics, and behavior, as there may be variation in infrastructure support across the areas. The Interview tool includes a discussion of DBI implementation goals and supports necessary to achieve these goals. The team should consider how DBI aligns with other district initiatives and how DBI may be integrated into extant systems.

Special education administrators may question whether it is feasible to implement DBI, particularly when reflecting on the resources that were made available to schools as part of NCII's TA efforts. We believe that a majority of school districts would be able to implement DBI with extant staff. Most districts have staff members who provide coaching and support to special educators. The focus of this coaching and support could be refined to focus on DBI. That said, starting small and ensuring that sufficient, ongoing professional development is in place will be important.

Step Three: Start With a Focused Pilot Project

A majority of school districts that received intensive TA through NCII started small to maximize success. They piloted DBI in one area (e.g., reading, mathematics, behavior) with a few students (i.e., two to six) at one or two schools. The members of the district-level DBI team should identify schools, school level leadership, and teachers who appear to be most ready and most enthusiastic about implementing DBI. Once the pilot sites and participants have been identified, the DBI team should ask participants to commit to the process for at least one academic year. As indicated in our interviews, more than one year of implementation may be necessary to build capacity and see positive effects in student academic and behavioral results.

The DBI team should consider how to evaluate pilot DBI success in the district. In many of the intensive TA sites, success in the initial years was focused on building infrastructure through professional development. In later years, DBI success at many schools was evaluated by examining progress monitoring data of students who were receiving DBI. Although evaluation plans may look very different across schools and districts, they

should include measurable goals that the DBI team examines to inform ongoing planning and improvement.

Step Four: Provide Necessary Professional Development to Personnel Involved with DBI

Special educators who will be implementing DBI and the teams of staff members who will be supporting them will need training on the DBI process. NCII has developed a series of eight training modules (<https://intensiveintervention.org/implementation-support/dbi-training-series>) that schools can use as the base for professional development, which should also include supplemental coaching and ongoing support. The modules provide an overview of the DBI process and more in-depth explorations of various components of DBI. In addition to these training modules, there are numerous webinars that expand upon module content and answer many frequently asked questions about DBI.

DBI teams could use professional learning communities (PLCs) to learn from the NCII resources and integrate DBI into their practice. Helman and Rosheim (2016) described the PLC model and provided an overview of research that demonstrates that PLCs are associated with increases in student achievement. Using the PLC model, teams of special educators and other school staff could form study groups to learn how to implement DBI from the online modules. Then, teams could follow the PLC model to implement DBI, establish procedures for ongoing review of progress, evaluate impacts on student outcomes, and make adjustments as needed.

DBI teams may also benefit from reviewing L. S. Fuchs, Fuchs, and Malone (2017). This article provides a detailed description of the taxonomy of intervention intensity. This taxonomy outlines seven dimensions for evaluating and building intervention intensity. The authors provide additional guidance to help schools design intensive intervention programs and to increase the quality of implementation.

Step Five: Have Documented Procedures and Intervention Plans in Place

One consistent piece of guidance provided by school personnel in the intensive TA sites was that written plans and procedures increased the likelihood that teams were successful in their DBI implementation. A

special issue of *Teaching Exceptional Children* published in March/April 2014 provides detailed case studies of DBI implementation in reading, mathematics, and behavior. These articles can be used to guide planning for how procedures and intervention plans can be documented. NCII has also developed a set of guidance documents (<https://intensiveintervention.org/implementation-support/tools-support-intensive-intervention-data-meetings>) that can be used to facilitate the DBI process. This includes a set of student meeting protocols to support teams in pre-meeting planning, initial DBI planning meetings, and ongoing progress monitoring meetings. Many of the documents are editable so that schools can make adjustments as needed. Additionally, NCII has developed a student progress monitoring graphing tool (<https://intensiveintervention.org/resource/student-progress-monitoring-tool-data-collection-and-graphing-excel>) that teams can use to set goals and graph students' progress toward these goals.

We believe it is also important that special education administrators plan for monitoring fidelity of DBI implementation. NCII has developed several resources that can support teams' efforts to do this (<https://intensiveintervention.org/implementation-support/fidelity-resources>). First, special educators or planning teams can use the *Intensive Intervention Implementation Review Log* to review, document, and improve implementation of DBI process. The *Data-Based Individualization Implementation Log* can be used as a daily and weekly record of implementation for individual students. This information, along with progress monitoring graphs, can inform team intervention and data review meetings. Also, teams can use the *Student-Level Data-Based Individualization Implementation Checklists* to monitor implementation of the DBI process during initial planning and ongoing review (progress monitoring) meetings. It is not essential that these specific forms be used; however, it is important that procedures for monitoring accurate implementation are documented so that teams are able to continuously monitor their accomplishments.

Step Six: Evaluate Progress and Plan for the Future

The final step is to deliver intensive intervention and make the ongoing adaptations to intervention necessary for many students with disabilities to

demonstrate adequate responsiveness. This will involve ongoing data collection, evaluation of student progress, and frequent planning meetings. As an administrator in an intensive TA school indicated, this is hard work. The DBI team should make plans to evaluate progress in DBI implementation each year. The team could revisit the *DBI Implementation Interview* and *DBI Implementation Rubric* (described in Step Two) at the end of each academic year to consider successes and to make plans for the upcoming academic year. In planning for subsequent years, teams should consider ways to extend DBI efforts to include additional students, teachers, and schools.

Conclusion

Special education administrators at both the district and school levels are serving in critical roles that uniquely position them to encourage and support the integration of DBI into the special education services provided to students with disabilities. This process is a systematic method special educators can use to enhance the academic and behavioral outcomes of their students. This paper summarized the lessons learned from schools that collaborated with NCII as they successfully implemented DBI. Our hope is that the lessons learned from NCII's TA along with the guidance provided for getting started with intensive intervention will increase the number of special educators who are able to deliver intensive intervention to their students and improve the outcomes of those with the most severe and persistent needs.

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