Indiana’s efforts to provide inclusive special education services for preschoolers with disabilities
Inclusive early childhood special education in Indiana
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Introduction

In 2016, the Indiana Department of Education (IDOE) and its Office of Special Education (OSE) contracted with the Early Childhood Center (ECC), Indiana Institute on Disability and Community (IIDC), Indiana University, to assist in promoting inclusive early childhood special education services for preschoolers with disabilities. The OSE’s vision is that all students, including those with disabilities, are held to high expectations and have equitable access to general educational opportunities that enrich their lives and prepare them for future success. The ECC was tasked with increasing the number of preschoolers with disabilities who are served in inclusive early childhood programs, attain important school readiness skills, and successfully transition into inclusive kindergarten classrooms. In its first year, the ECC examined current early childhood special education practices in Indiana—specifically, practices provided in inclusive early childhood settings that brought about positive child outcomes. This report summarizes what we did and what we learned about current special education services and outcomes for preschoolers with disabilities in Indiana.

In September 2015, the U.S. Department of Education and the U.S. Department of Health and Human Services issued a joint Policy Statement on Inclusion of Children with Disabilities in Early Childhood Programs for “increasing the inclusion of infants, toddlers, and preschool children with disabilities in high-quality early childhood programs.” The policy statement outlined both the research and legal foundations supporting inclusion in high-quality early childhood programs, provided both recommendations and resources to state and local education programs, and established an expectation of high-quality inclusion for all young children with disabilities in early childhood programs. This joint policy statement was followed in January 2017 with a Dear Colleague letter from the Acting Director of the Office of Special Education Programs (OSEP). Despite the expansion of state early learning/pre-kindergarten programs throughout the country, OSEP was not seeing a commensurate increase of inclusive learning opportunities for young children with disabilities. That letter reaffirmed the position of the U.S. Department of Education “that all young children with disabilities should have access to inclusive high-quality early childhood programs where they are provided with individualized and appropriate supports to enable them to meet high expectations”.

Following the Joint Policy Statement and passage of Every Student Succeeds Act (ESSA), the OSE crafted a conceptual framework labeled Every Student Succeeds, which builds on the principles set forth by the federal government—promoting student outcomes (high expectations) through a system of services that are equitable, accessible, and rigorous. This framework (see Figure 1) outlines the importance of students with disabilities, including preschool-aged children, and ensures their access to general early childhood programs, general early education curricula, and

![Figure 1. Every Student Succeeds Framework.](image-url)
resources that meet their individual needs. It also highlights a number of critical program elements that contribute to rigorous, equitable, and accessible early childhood special education services that promote important preschool outcomes.

In November 2016, the OSE expanded its contract with the IIDC to include an early childhood focus in its efforts by bringing in staff from the ECC. This action was taken in the context of national and state initiatives concerning the importance of high-quality inclusive services and Indiana’s least restrictive environment (LRE). Current LRE placement and child outcome data suggested that little progress had been made over the past several years in increasing the number of preschoolers with disabilities receiving services within general early childhood classrooms.

As part of this contract expansion, the ECC proposed the following outcomes:

- Identify school districts that provide special education services to preschool and kindergarten-aged children in general early childhood settings and have a substantive impact on children’s learning.
- Identify evidence-based practices and models that provide effective inclusive early childhood special education services implemented in Indiana school districts.
- Identify the resources and supports Indiana’s school districts need to provide inclusive early childhood special education services for all preschoolers with disabilities.
- Provide training and technical assistance to Indiana school districts to increase the percentage of preschoolers with disabilities receiving high quality special education services in general early childhood settings.
- Identify and promote evidence-based strategies that contribute to the effective transition of preschoolers with disabilities into general education kindergarten classrooms.

**Theory of Action**

An abundance of research defines inclusive services and suggests how inclusive practices should be implemented to truly have an impact on children’s learning and their membership in the school community. In their joint position statement, the Division for Early Childhood (Council for Exceptional Children) and the National Association for the Education of Young Children (2009) described three key features of inclusive early education:

- Access - provision of wide-ranging activities and environments by removing physical barriers and offering multiple ways to promote learning;
- Participation - use of varied instructional approaches that promote engagement, play, learning, and a sense of belonging
- Supports – implementation of system procedures such as professional development and opportunities for collaboration between families and professionals.

Along with these defining features, the preschool inclusion research identifies commonly agreed upon practices that guide practitioners to provide high quality preschool inclusion. These include:

1. individualized instruction;
2. Universal Design for Learning (UDL) principles for creating equitable and accessible learning environments (Blagojevic, Twomey, & Labas, 2002; Conn-Powers, Cross, Traub, & Hutter-Pishgahi, 2006);
3. ongoing assessment or progress monitoring and curriculum adjustments;
4. administrative supports;
5. collaboration between practitioners and families; and
6. professional development (Odom, 2011).

We compiled and organized the preschool inclusion research literature into an overall framework or Theory of Action (see Figure 2 on the next page), borrowed heavily from the DEC’s Recommended Practices (2014), to outline the elements and strategies that need to be in place in order for children with disabilities to be effectively included in general early childhood environments, receive the individualized education they need, and experience the long-term outcomes identified below. The long-term outcomes in our Theory of Action (ToA) are borrowed from the joint position statement adopted by the Division for Early Childhood (DEC) and the National Association for the Education of Young Children (NAEYC): “a sense of belonging and membership, positive social relationships and friendships, and development and learning”.

The following ToA presented in Figure 2 begins with the end in mind—identifying short and long-term outcomes for all preschoolers with disabilities: full membership and participation, which begins with supporting the child’s successful engagement in all early childhood activities and children learning to accept and support one another; and, successful learning in general education, which begins with learning skills identified in the child’s IEP and from the general early childhood curriculum. In order to accomplish these outcomes, early childhood special educators and general early childhood practitioners need to carry out key strategies, such as the application of UDL principles and the implementation of effective inclusive service models. These strategies ensure that children receive an inclusive and individualized education in a classroom environment that offers the necessary adaptations and accommodations. Finally, carrying out these strategies cannot take place unless there are fundamental resources and supports in place. Necessary resources include local administrative support and direction, provision of professional development, and access to high quality general early education settings.

**Year 1 Project Activities**

During the project’s first year, Early Childhood Center staff carried out four major activities:

1. Analyzed IDOE’s special education least restrictive environment placement (LRE) and child outcome (ISTAR-KR) data,
2. Reviewed the literature to identify evidence-based and promising practices for high quality inclusive early childhood special education services,
3. Examined the practices and models employed by Indiana school districts implementing inclusive early childhood special education programs, and
4. Interviewed special education administrators and practitioners to determine facilitators, barriers and possible guidance for implementing high quality inclusive services.
Figure 2. Theory of Action on preschool inclusive services.
Analyze Special Education Placement and Child Outcome Data

A data share agreement between IDOE and ECC was developed to enable the ECC’s access to special education placement data for preschool and kindergarten-aged children with disabilities from 2009 through December 2016 and ISTAR-KR data to be used for calculating child outcomes. Working closely with OSE staff, analyses of both data sets were conducted to identify districts with above average, average and below average levels of inclusive practices for preschool-aged children and their corresponding level of impact on children’s learning. Next, ECC staff assisted in analyzing ISTAR-KR data for completion of OSE’s Annual Performance Report to OSEP (see Table 1 for the federal child outcomes).

Review the Literature for Research-Based Inclusive Practices

While analyses of the special education LRE and ISTAR-KR data were being performed, ECC staff were conducting an extensive review of the literature to identify and confirm which models and practices for providing high-quality inclusive early childhood special education services are evidence-based or have sufficient research to show promise of their effectiveness. This review of the literature was incorporated in the Theory of Action discussed previously. Additional pertinent references have been embedded throughout this report.

Examine Current Practices in Indiana’s School Districts

After the data analyses and review of the literature, ECC staff met with the OSE to share its results and Theory of Action. ECC staff shared findings concerning how Indiana school corporations compared with one another along two dimensions—the percentage of children receiving early childhood special education services in inclusive general early childhood programs and the percentage of children making substantial gains in their learning as measured by the three child outcomes included in the State’s Annual Performance Report to OSEP.

Following that presentation, a list of 20 districts with below average to above average rates of inclusion and below average to above average rates of child impact were identified and invited to participate in a study examining inclusive service delivery models and instructional practices used with preschoolers with disabilities. This study, which employed survey, interview, and observation protocols, was designed to begin answering the following questions:

- What service delivery models and instructional practices are used for providing special education services in regular early education classrooms?
- Which models and practices tend to be associated with higher percentages of children showing substantial improvement in learning and development?
- What are major resources needed to implement high-quality inclusive services to preschoolers with disabilities, and conversely, barriers that prevent implementation? What are the major

Table 1

<table>
<thead>
<tr>
<th>Federal Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>The percentage of children who demonstrated improvement:</td>
</tr>
<tr>
<td>1. Positive social-emotional skills (including social relationships);</td>
</tr>
<tr>
<td>2. Acquisition and use of knowledge and skills (including early language/communication [and early literacy]); and</td>
</tr>
<tr>
<td>3. Use of appropriate behaviors to meet their needs.</td>
</tr>
</tbody>
</table>
resources needed for and barriers to implementing high-quality inclusive services to preschoolers with disabilities?

• What state, regional, and local policies, procedures, and resources exist or are lacking for supporting inclusive special education services?

• What transition practices are used to effectively place and serve young children with disabilities in kindergarten classrooms?

Seventeen of the 20 school districts invited agreed to participate in this study, with 54 administrators and direct service providers (teachers, therapists) participating in an online survey. Following the survey, 25 administrators (special education directors, preschool special education coordinators, principals) and 32 classroom practitioners participated in one-hour interviews. Subsequently, observations of inclusive practices were conducted in 12 classrooms. Finally, one-hour interviews were also held with three state agency administrators: Office of Special Education (OSE); Office of Early Learning within IDOE; the Office of Early Childhood and Out of School Learning (OECOSL) in FSSA and with six state inclusion specialists funded by OECOSL. Interview and observational data were analyzed using accepted qualitative analyses protocols through a software program, NVivo.

**Identify Challenges to and Resources for Implementing High Quality Inclusive Services**

The final activity outlined in the first year of this project was to compile the above analyses into written form to provide guidance to Indiana’s school districts interested in developing and offering high-quality inclusive services to an increasing number of preschoolers with disabilities. This activity is in process and includes this report and the development of a PowerPoint presentation for school districts throughout the state. This report and the presentation will be used to support school districts interested in working with us to design and implement more inclusive early childhood service programs.
An Analyses of Indiana’s Least Restrictive Environment Data for Preschoolers with Disabilities

Each year, the Indiana OSE is required to conduct a December 1 Child Count in which the number of children and students with disabilities and receiving special education services are identified. Included in that annual count is a placement determination that is reported under the State’s Least Restrictive special education setting and whether they receive the majority of special education services in the general or special education setting. It also includes the study categories we used in reporting a summary of the data. This data is presented in Table 2. It outlines the distinct federally-determined placement categories, definitions in terms of placement and where the majority of special education services are provided, and how we classified each placement category for the purposes of our study.

Table 2
Least restrictive environment placement data for preschoolers from 2013-2016

<table>
<thead>
<tr>
<th>LRE Code</th>
<th>Placement</th>
<th>Location of Special Education Services</th>
<th>Study Categories</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>Regular early childhood setting &lt;10 hrs./week</td>
<td>General Ed classroom</td>
<td>GenEd Placement-Inclusive</td>
<td>2,936</td>
<td>2,884</td>
<td>2,941</td>
<td>2,916</td>
</tr>
<tr>
<td>27</td>
<td>Regular early childhood setting ≥10 hrs./week</td>
<td>Special Ed setting</td>
<td>GenEd Placement-Not Inclusive</td>
<td>1,072</td>
<td>1,065</td>
<td>1,021</td>
<td>1,152</td>
</tr>
<tr>
<td>28</td>
<td>Regular early childhood setting &lt; 10 hrs./week</td>
<td>General Ed classroom</td>
<td>GenEd Placement-Inclusive</td>
<td>913</td>
<td>847</td>
<td>798</td>
<td>788</td>
</tr>
<tr>
<td>29</td>
<td>Separate special education class</td>
<td>Separate school</td>
<td>Not inclusive</td>
<td>5,065</td>
<td>5,021</td>
<td>5,042</td>
<td>4,982</td>
</tr>
<tr>
<td>33</td>
<td>Non-General Ed Setting</td>
<td>Residential facility</td>
<td>Not inclusive</td>
<td>229</td>
<td>237</td>
<td>345</td>
<td>401</td>
</tr>
<tr>
<td>34</td>
<td>Non-General Ed Setting</td>
<td>Walk-in-specially educated</td>
<td>Not inclusive</td>
<td>1,969</td>
<td>1,940</td>
<td>1,838</td>
<td>1,787</td>
</tr>
<tr>
<td>35</td>
<td>Private School</td>
<td>Parentally placed in Private Preschool</td>
<td>Private School (Unknown)</td>
<td>0</td>
<td>136</td>
<td>246</td>
<td>297</td>
</tr>
<tr>
<td>36</td>
<td>School-age codes</td>
<td>Homebound</td>
<td>Not inclusive</td>
<td>59</td>
<td>63</td>
<td>56</td>
<td>54</td>
</tr>
<tr>
<td>37</td>
<td>Total Number of Prekindergarteners with disabilities</td>
<td>12,928</td>
<td>12,878</td>
<td>12,890</td>
<td>12,982</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Over the past four years, the placement of preschoolers with disabilities in inclusive settings has remained fairly constant. Figure 3 illustrates the percentage of preschoolers placed in one of three settings representing the study categories presented earlier in Table 2. On average, approximately 29% of preschoolers have received the majority of their special education services in general early childhood settings; another 14%, while enrolled in a general early childhood program, did not receive the majority of special education services within that general education setting. The majority of children (57%) receive special education services in restrictive special education settings.

There are differences in terms of which children are more likely to receive inclusive services. Figure 4 highlights 2015 placement data for children by disability category. The dashed line represents the state average (29.6%) for 2015. We can see that children with visual impairments or language impairments were slightly more likely to receive inclusive services (43% and 37%, respectively) than children with other types of disabilities. Children with language or speech impairments comprised 53% of the preschool population for 2015. While children with

![Figure 3](image1.png)

*Figure 3. Percentage of preschool children receiving inclusive and not inclusive services.*

![Figure 4](image2.png)

*Figure 4. Percentage of children by disability receiving inclusive services.*
developmental delays comprised 34% of the preschool population, only 21% of them received inclusive services.

The biggest determinant as to whether a preschooler with disabilities receives inclusive services in a general early childhood setting is the school district in which he or she lives. The 2015 placement data reveals that school districts ranged from 0% to 100% in terms of the proportion of children receiving inclusive services. The statewide average is close to 30%, however, the median percentage across school districts is just 16.1%—that means that one-half of the districts included less than 1 out of every 6 preschoolers, and one-half of the districts included more preschoolers. Figure 5 is a histogram identifying the number of districts by the percentage of preschoolers with disabilities receiving inclusive services. In 2015 one hundred and ten school districts (out of 273) provided inclusive special education services to less than 10% of their preschool population while 16 school districts provided inclusive services to 90% or more of their preschoolers.

![Figure 5. Number of districts by percentage of preschoolers receiving inclusive services.](image)

Based on these analyses, we were able to identify school districts that fell into one of three ranges for inclusive preschool services: average (within plus or minus 0.5 Standard Deviations (SD) of the 30% state average), above average (greater than 0.5 SD), and below average (less than -0.5 SD). Table 3 provides the number of districts falling into these three ranges.

<table>
<thead>
<tr>
<th>Number of School Districts by Inclusion Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above average (41 - 100%)</td>
</tr>
<tr>
<td>74</td>
</tr>
</tbody>
</table>
An Analysis of Indiana’s Impact on Preschoolers with Disabilities

In addition to looking at the percentage of preschoolers with disabilities included in general early childhood programs, we also looked at program impact on child outcomes. We wanted to identify school districts that provide inclusive services and have a positive impact on children’s learning and development. Impact was determined by looking at the ISTAR-KR assessment data collected on all children with disabilities and by using the same measures the OSE uses in its federal Annual Performance Report to OSEP. All states report on the percentage of children who improve in each of three outcome areas: 1) Positive social-emotional skills (including social relationships), 2) Acquisition and use of knowledge and skills (including early language/communication [and early literacy]), and 3) Use of appropriate behaviors to meet their needs. As children exit preschool, pre- and post-ISTAR-KR data is compared to determine the level of progress each child made and is summarized into two measures:

- Percentage of children who began with developmental delays in the outcome area, and
- Percentage of children who exited preschool functioning at a level comparable to same-aged peers.

Figure 6 highlights the percentage of children who showed improvements in their learning and development. The top set of lines show the percentage of children who made substantial improvements in their learning. The lower set of lines show the percentage of children who functioning within age expectations of their typical peers. For Federal Fiscal Year 2015, based on children included in the December 1, 2015 child count, 71-79% of the children showed substantial improvement in the three outcome areas. For that same year, 19-27% of children demonstrated age-level functioning across those same three outcomes. Please note, these numbers may be slightly different from the outcome numbers.
reported by OSE for the past four fiscal years. The numbers reported here include all children that were in the prior December 1 child count and who had complete pre- and post-assessment data.

For the purposes of this study, we defined positive impact based on the percentage of children making **substantial improvements** in Outcome B- Acquisition and use of knowledge and skills (including early language/communication [and early literacy]). In 2015, 76% of preschoolers with disabilities showed substantial improvement.

There are differences among preschoolers regarding which children are more likely to experience a positive impact. Figure 7 highlights 2015 impact/outcome data by disability category. The dashed line represents the state average (76%) for 2015. We can see that children with language impairments, developmental delays, or who were deaf were close to the state average and more likely to experience a positive impact than children with other types of disabilities. In this sample, children with language or speech impairments and children with developmental delays represent 84% of the preschool special education population for 2015.

The average school district percentage of children showing substantial improvements on the acquisition and use of knowledge and skills is represented in Figure 8 on the next page. Sixty-one percent of the 259 districts reported have a positive impact on 70% or more of the preschoolers they serve.

Based on these analyses, we identified school districts that fell into one of three ranges of positive impact: average (within plus or minus .5 SD of the state average, above average (greater than 0.5 SD), and below average (less than -0.5 SD). Table 4 provides the number of districts falling into the three ranges (including only the 259 districts for whom there was both LRE and child impact data).

**Figure 7.** Percentage of children by disability experiencing positive impact.

*Some disability categories do not appear because there were fewer than 10 children

<table>
<thead>
<tr>
<th>Table 4</th>
<th>Number of School Districts by Positive Impact Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Above average (82 - 100%)</td>
</tr>
<tr>
<td></td>
<td>83</td>
</tr>
</tbody>
</table>
These analyses of the percentages of preschoolers with disabilities receiving inclusive special education services and experiencing positive impact enabled us to group school districts based on these two dimensions. Table 5 shows the intersection of these two variables, inclusion and positive impact, along our three ranges. The cells represent the number of school districts. For example, there were 20 school districts in which the percentages of children receiving inclusive services and experiencing a positive impact were higher (above average) than all other districts in Indiana. Conversely, there were 23 school districts who were below the state average in terms of the percentage for children receiving inclusive services and demonstrating positive impact.

These analyses of the percentages of preschoolers with disabilities receiving inclusive special education services and experiencing positive impact enabled us to group school districts based on these two dimensions. Table 5 shows the intersection of these two variables, inclusion and positive impact, along our three ranges. The cells represent the number of school districts. For example, there were 20 school districts in which the percentages of children receiving inclusive services and experiencing a positive impact were higher (above average) than all other districts in Indiana. Conversely, there were 23 school districts who were below the state average in terms of the percentage for children receiving inclusive services and demonstrating positive impact.

<table>
<thead>
<tr>
<th>Percentage of children showing substantial improvement</th>
<th>Positive Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Above</td>
</tr>
<tr>
<td>Inclusion</td>
<td></td>
</tr>
<tr>
<td>Above</td>
<td>20</td>
</tr>
<tr>
<td>Average</td>
<td>26</td>
</tr>
<tr>
<td>Below</td>
<td>37</td>
</tr>
</tbody>
</table>

This data informed our selection of school districts ranging from above to below average in inclusive services and child impact. Seventeen of the 20 districts we invited to participate in our study helped us to understand what high quality inclusive special education services in Indiana look like, as well as the challenges of developing and implementing those programs.
Inclusive Service Models and Practices Observed Among Indiana Programs

From the inception of inclusive education, a driving force has been the belief and philosophy that all children with disabilities can and should learn in the mainstream of life in schools and community. What this can and should look like, however, varies considerably. Over the past 30 years, the preschool inclusion literature has articulated multiple interpretations of how inclusive services are delivered. Complicating the landscape further is the fact that there has been a lack of universal language to describe various service models, i.e. co-teaching/team-teaching, consultative, itinerant consultation, direct, indirect, push-in, etc. (Richardson-Gibbs and Klein, 2014). Blended classrooms, where the individual needs of young children with disabilities are addressed by a preschool curriculum for all children and in an inclusive classroom, were reported as the most commonly used preschool service model (Grisham-Brown, Hemmeter, & Pretti-Frontczak, 2005).

In this context, what do inclusive early childhood special education services look like in Indiana? What common service models and practices are used among programs that successfully include high or above average numbers of preschoolers with disabilities in general early childhood programs? Using our Theory of Action and recommended practices in the literature, we surveyed, interviewed, and observed classrooms in 17 different Indiana school districts during the 2016-17 school year. The models and evidence-based practices we heard about and observed are summarized below.

Embedded Services, Including Co-Teaching

One of the most common service delivery models we heard about and observed was special educators and therapists providing direct services within the regular early childhood classroom environment. Embedding special education and related services (push-in services), especially when effective co-teaching approaches were used, provided an effective model for including a large number of preschoolers with disabilities. In this model, special education services were either provided in the context of the everyday classroom routines and activities; or, in some cases, provided in an alternative small group activity that occurred in the classroom independent of the ongoing activities.

While Indiana’s early childhood special educators expressed using multiple co-teaching approaches, the majority appeared to use alternative teaching (separate small group instructional activity), station teaching (working with small groups of children at one of the free play centers), and/or teaching (and occasionally team-teaching) a lesson with the whole class. For example, a Speech and Language Pathologist in one of our study districts would plan and deliver a whole group lesson, embedding her therapy goals into that lesson so all children benefit. In other instances, special educators would join in the ongoing classroom activities and provide individualized instruction within the ongoing classroom activities, either assisting the classroom teacher or taking over a small group table or area of the classroom.

Early childhood special educators using this model frequently employed one or more of a number of effective inclusion practices. Most often, special educators (and general early educators) would provide embedded instruction within and across multiple classroom routines and activities. In this practice, both special and general educators identify multiple opportunities throughout the classroom day to ‘work on’ the skills targeted in children’s IEPs (Lawrence, S., Smith, S. and Banerjee, R., 2016). This practice ensures that children’s individual needs are met without having to rely on pull-out or separate/resource room interventions). In a large-scale review of studies using embedded instruction, Recap and Parklak-Rakap (2011) concluded that embedded instruction is an effective practice for teaching a range of skills,
including language, pre-academic, and social skills to children with disabilities in inclusive preschool districts. Additionally, they found that embedded instruction resulted in the generalization of these skills across settings, activities and people, as well as the maintenance of these skills over time.

Another co-occurring practice was explicitly teaching and promoting critical social skills that enabled children to be successful members of the early childhood classroom community. The important skills all children need to learn to be successful members and learners included initiating and sustaining positive interactions and conversations, taking turns, asking peers for help, and resolving conflicts. Special educators and general classroom teachers took the time to teach, model, scaffold, and reinforce children who did not have many of these social skills. Our study participants stated that they made constant efforts to pair kids to take advantage of strengths; plan turn-taking activities; encourage children to seek out peers for assistance; model problem-solving between peers and facilitate resolution.

One last practice mentioned was the importance of both the general and special early educators meeting and working together to determine when, where and how individualized instruction could be provided within the typical classroom routines. The use of collaborative planning, while challenging to implement given limited time and opportunities to meet, enabled both parties to jointly determine times and strategies for embedding instruction, and identify the best times for the special educator to come in and co-teach.

Consultative or Itinerant Services

A second service delivery model that was discussed by our study participants was a consultative or itinerant services model. In this model, the special educator advises and assists the general classroom teacher in collaboratively designing and carrying out lessons that address the individual needs of all children in her classroom. From our conversations and observations, consultative services occurred in the context of regular weekly meetings in which both educators discuss individual children and develop strategies and lesson plans for addressing individual and group needs. In other instances, the special educator may spend time observing in the classroom and then meeting later with the classroom teacher to discuss those observations and collaboratively problem solve around shared concerns. In a few instances in one school district), both the general and special early educators jointly plan and team teach in the classroom. A consultative model is generally aimed at supporting the classroom teacher as she embeds individual and universally designed teaching practices into her ongoing classroom routines. It can also support the application of Universal Design for Learning (UDL) principles for creating equitable and accessible learning environments (Blagojevic, B., Twomey, D. and Labas, L. 2002; Conn-Powers, Cross, Traub, and Hutter-Pishgahi, 2006). For example, both general and special educators in our study noted instances in which teachers learned to use both visual (pictures) and auditory cues in providing information and giving directions. Seating and other physical arrangements were discussed in ensuring equitable access to small and large group instruction.

Family Engagement Practices

As part of our effort to determine which evidence-based practices Indiana districts were using to provide inclusive services, we also looked at family engagement practices. Family engagement refers to family-professional collaboration. It supports opportunities for both relationship building and the active
participation of caregivers and practitioners in achieving mutually agreed upon goals. In our study, the survey and interview protocols included the family engagement practices put forth in the 2014 Recommended Practices by the Division for Early Childhood (DEC). DEC utilizes three themes to anchor its recommended family practices: family-centered practices, family capacity building, and family professional collaboration. The recommended practices we used included:

- Promote active participation of families in decision-making related to their child (e.g., assessment, planning, interventions);
- Development of the service plan (e.g., goals, services and supports to achieve goals);
- Support families in achieving supports for their child

What are some of the family engagement practices occurring among Indiana school districts that provide inclusive services to a majority of their preschoolers with disabilities? From our surveys and interviews, we learned that many of the districts were implementing three key practices. First, they provide information so families can make informed decisions. This includes informing families so that they know and understand their rights. Most districts frequently have conversations and elicit family input at eligibility, case conferences, service plan development, and at transition to ensure that families are well informed.

A second strategy districts reported carrying out was working with their families to identify skills to help their child be successful in the general education classroom. Case conference meetings were generally the times that the classroom teachers talked about the social, behavioral, and learning skills their children needed to learn to function successfully in regular early education settings. Some districts also reported providing this information through ongoing communication updates (e.g., notes home, communication books, video sharing, and email and phone calls, as needed).

A third and final strategy was working with families to plan and problem solve as a team. As children are placed in general early childhood programs, the team expands to include new members (general early childhood program staff). Families then begin to learn to negotiate both the special education and the general education systems in which their child will be a part. Learning to function as part of a larger team becomes more important as new and sometimes more complex issues/decisions need to be addressed.

While many of the districts expressed the value of family engagement and in implementing these practices, most also acknowledged the challenges of engaging all families, especially those in poverty. They frequently identified this as a major professional development need.
Practices That May Also Contribute to Children’s Learning

Simply providing inclusive preschool experiences is not enough. To be effective, classrooms must also implement inclusive evidence based practices (EBP) that enable children to achieve high outcomes (Division for Early Childhood, 2007; Henninger IV, Gupta, & Vinh, 2014). While many of the districts included in this study had above average inclusion, not all were as effective in bringing about positive child impact (i.e., substantial improvement in children’s use of knowledge and skills). We were curious in determining what additional or qualitatively different practices were important in also achieving above average impact. This part of our study is suggestive—we looked for practices that have support in the literature for contributing to children’s learning, and that answer a fundamental question:

How can we include children with disabilities in general early childhood programs, including children with intense learning needs, and provide an individualized education that meets those needs?

Embedded Instruction

The first practice builds on the embedding of services mentioned above, but emphasizes the quality, intensity, and frequency in which services (instruction, therapy) are embedded into the ongoing classroom routines and activities. The use of instructional practices that included embedded instruction (providing instruction in every day environments, activities and routines), curriculum differentiation, and the use of a strong curriculum was a common theme among our above average programs. In their recent review of research on these naturalistic instructions, Snyder, Rakap, Hemmeter, McLaughlin, Sandall, and McLean (2015), found that “in the majority of studies, naturalistic approaches resulted in the acquisition of targeted skills, including communication, social and pre-academic competencies.” Accomplishing this first practice also requires a strong early childhood program that welcomes this level of involvement and provides clear and frequent opportunities for teaching and learning. Classrooms that were more play-based and employed few teacher-led learning opportunities were mentioned in one district as a challenge.

Along with this first practice is the level of scaffolding provided to support children’s learning. Important scaffolding skills include the use of explicit feedback and positive models to support children’s acquisition of new skills. It also includes the use of encouragement and positive consequences to reinforce both children’s learning and continued engagement.

Universal Design of Learning

A second recurring practice was the use of UDL principles. While programs applied UDL principles to promote fundamental access to the physical and learning environment, there were few programs that more clearly embraced its importance in making learning accessible for all children.

Ongoing Progress Monitoring

A third practice concerned the collection and use of data. In a few programs, it was clearly evident that teachers and administrators carried out and relied on ongoing progress monitoring as a key element of their program. If children were not learning, these programs had the data and the procedures to identify that sooner and do something about it. From our interviews, it was clear that ongoing data collection and use of that data to inform practice were strong elements of a few programs, which influence their quality and impact.
Collaborative Decision Making

A fourth practice was the level of collaboration that occurred among all educators. A few districts noted the importance of having established times during the week for the general and special educators to meet and collaboratively plan. Some districts even noted the use of Professional Learning Communities and Response to Intervention (RTI) committees that included the preschool program. These supports led participants to comment that strong teams were an important factor.
Recognizing and Addressing Challenges

Study participants were asked to identify challenges they had experienced in designing and implementing inclusive early childhood special education services. They were also asked to share the strategies and resources they had found useful or, if they were still confronting the challenge, the strategies and resources they felt would be helpful. Some of the major themes we heard, along with our analyses of these challenges, are summarized below. The five major challenges presented were identified by a majority of the districts in our sample. We have also included helpful resources and solutions for addressing these challenges. These were either shared by our study participants or added based on our previous work.

Having Sufficient Staff

When moving to a more inclusive service model in which preschoolers with disabilities were previously served in a single self-contained classroom and placed in multiple early childhood classrooms, one of the more frequently mentioned challenges concerned staffing. Often this challenge was framed as “not having enough staff” to provide the intensity of direct services that had been previously provided in the self-contained classroom. Early childhood special educators noted the challenge in providing enough services and supports to “meet individual needs” or to address safety issues “when there is a meltdown and there are just not enough hands.” The availability of the special education staff, particularly therapists, was also brought up in the context of having enough time to collaborate in general.

While this challenge was typically presented as not having enough staff to meet the needs of all children, it can be explained another way—adjusting to providing services differently and collaboratively. Moving to an inclusive services model expands the number of professionals who will take part in each child’s education to include the general early childhood staff. Rather than the special educator taking sole responsibility for providing all instructional services to all children on a caseload, the role shifts to working in greater collaboration with the other classroom educators to address the individual needs of all children. From this perspective, the challenge changes from not having enough staff to one of supporting special education staff to take on new roles and responsibilities.

Whether the challenge is ensuring adequate staffing or helping staff acclimate to new roles and their responsibilities, key supports and resources will be necessary. Chief among those identified by our participants is administrative support. Local school administrators will need to work with their staff to guide and support the adoption of new and collaborative service approaches to providing special education services, and if resources are insufficient, school administrators should support allocating additional resources. Administrative support for the general early educators is equally important as they take on new roles and responsibilities in educating all preschool-aged children. Several participants from our above average (inclusion) districts commented on the support of their administrators both philosophically (shared vision, belief in the benefits of inclusion drives the model) and physically (they are always there to help, both special education and building administrators are available for problem-solving). A third and related resource is hiring qualified staff who have the skills and willingness to design and implement education programs that effectively serve all children. Finally, ongoing professional development will be needed to support staff as they acquire the knowledge and skills they will need to assume new roles and responsibilities.
Children with Intensive Educational and Behavioral Needs

A second challenge with moving to an inclusive services model was determining how to address the intense, unique educational and behavioral needs of children with more significant disabilities. Children with significant intellectual and/or physical disabilities, mental health and behavioral issues, and children with autism challenged our study participants. Even among the school districts in our above average inclusion group, most still provided pull out, resource room, or self-contained classroom services for a small number of children. As one administrator put it, not only do these children present unique and intensive challenges, but our study participants commented that it is difficult to balance those needs with the needs of the other children in the classroom. They expressed the difficulty they had in differentiating services to address the large range of children’s needs that existed on their caseload. Related to this was the fact that a couple districts found it difficult to maintain natural proportions and not place too many children with IEPs into any one classroom in order to meet those needs.

Part of this challenge is how school districts have distributed children with more significant disabilities to special educators’ caseloads. In our sample, many school districts tended to group children with the most intense needs into self-contained classrooms, thus limiting responsibility for their education to those few teachers. In moving to a more inclusive service model, children could be distributed based on where they live and their home school rather than to a few teachers. This addresses, in part, a challenge to having one or a few teachers responsible for all children with the most intense needs. It does present another challenge—ensuring all special educators have the skills to design interventions that address the broad needs of all children on a given caseload.

The challenge of effectively addressing all children’s individual needs does require essential supports and resources. General and special educators will need time together to design, implement, and evaluate individualized education programs and supports. Special education staff may need professional development to support translating their expertise into practical strategies that work in the regular early childhood classroom. General educators may need professional development support to learn individualized teaching strategies, positioning and handling techniques, or new classroom management skills. Both sets of educators will need support to design and implement effective progress monitoring strategies for all children. Many participants commented on the fact that they:

- collect data regularly (),
- share it with the team (), and
- use the data to inform instruction ()

"It can be challenging to ensure children with high support needs get the intensive intervention needed.”
Time Issues

A third challenge was that of time—time to meet and collaborate, time to collect data, time to travel to different schools/programs, time to do the necessary paperwork, time to evaluate newly identified children, and time to provide direct services. Several study participants expressed frustration in managing all of the to-do’s in their daily schedule. Compounding these scheduling difficulties was having to work around other people’s schedules (e.g., general early educator). As one participant put it:

Key resources in addressing the challenges of time constraints include prior planning and administrative support. As programs move to an inclusive service model, administrators and direct service providers need to account for all demands and allocate time to address them. This may involve providing some level of flexibility in special educators’ schedules to allow time to meet and plan with the general early educators. All districts identified as providing above average inclusive services commented on the importance of time for collaboration. In addition to needing time for collaboration, special educators also need time and flexibility to review progress and complete reports, to travel between sites, and to make changes in their schedule if there is an emergency requiring attention in another classroom. Having this level of flexibility requires administrative understanding and support. As the special educator role shifts from that of classroom teacher to one which includes the important elements of collaborative planning, observing classroom interactions, providing technical support and coaching, and supporting ongoing problem solving, administrators need to recognize and support these new roles and their time obligations. As one administrator said when asked what they do to support their staff:

“Teachers have time to collaborate on data collection methods and analysis and developing instructional strategies, for ongoing give and take.”

Ongoing Professional Development

Addressing many of the challenges voiced by our study participants will require ongoing professional development. How do I work with general early educators to integrate children with disabilities and their IEP goals into their curriculum and daily routines? How do I design interventions in which instruction is embedded into typical activities and meets the needs of individual children? How do I make adaptations and accommodations (and other UDL changes) to enable children with different disabilities to access and engage in the classrooms learning opportunities? How do I work with the classroom teacher to supplement their classroom management practices to meet the more intense behavioral challenges of some children? As one of our study participants commented:

This district listed training as one of the major challenges for them.
A key resource in meeting this challenge is for school districts and their staff to have access to high quality professional development, including face-to-face training, opportunities for problem solving and technical assistance, and more intense coaching support. A second critical resource is recruiting and selecting staff who have the fundamental skills to collaboratively design, implement, and evaluate inclusive services. A majority of our sample administrators mentioned having qualified staff as important for supporting quality inclusive efforts:

“"We hire skilled teachers and that helps us to move children forward."

Teachers in the above average sample also noted that working in a more inclusive model is a lot of work and teachers need to have willing spirits. Some also noted the importance of having experienced staff who can help mentor new teachers.

Finally, administrators will be paramount in supporting their staff in taking advantage of needed professional development opportunities. As administrators in our sample shared:

“"We are always trying to improve. We find out what are best practices and offer professional development to our staff in order to bolster staff skills."

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Recommendations

Where do we go from here? How do we build on what we’ve learned this past year to address an important need in Indiana—ensuring all preschoolers with disabilities are placed in general early childhood classrooms and receive effective inclusive special education and related services that address their individual needs?

Using the work of Fixsen and his colleagues (Fixsen, Blasé, Horner, Sims, and Sugai, 2013; National Implementation Research Network), we’ve adopted an implementation science framework for sharing our recommendations for next steps. Fixsen and his colleagues have developed a framework for scaling up innovative practices (e.g., effective inclusive instruction) across local and state systems of education. They have found that there are three components that need to be in place in order for change to take place and desired outcomes accomplished:

- Specific innovative practices that research has shown to be effective in bringing about desired outcomes need to be defined;
- Enabling contexts, in which state and local systems and leadership provide the necessary guidance and support, must exist; and
- Effective implementation practices, which include both infrastructure (e.g., implementation teams) and clear procedures for supporting and sustaining adoption of the evidence-based practices, must be carried out.

Over this past year, much of our work has fallen under what Fixsen (Fixsen et.al., 2013b) identifies as the Exploration Stage of implementation. A major part of this initial planning stage is to identify the following:

- needed changes to the current service system (e.g., increase in high quality inclusive services);
- possible solutions (e.g., inclusive service models, collaborative service models, UDL); and
- needed resources and strategies to establish and support adoption of the innovative practices (e.g., professional development, administrative support).

Accomplishing these steps will provide information to enable state (or local) administrators to determine if they are ready to proceed in implementing change. It is in that context we offer the following recommendations:

1. Improve the accuracy of current data collection and reporting efforts.
2. Identify the innovative early education practices you wish to promote.
3. Establish a clear plan that signals the State’s readiness for change.
4. Establish a collaborative, cross-agency, state implementation team.
5. Establish a Transformation Zone to pilot the proposed changes in practices and policies.
6. Complete our Year 1 work examining kindergarten and kindergarten transition practices.

1. **Improve the Accuracy of Current Data Collection and Reporting Efforts.**

Although not mentioned in our report above, there were times during our interviews that administrators and educators expressed surprise at how their interpretation and completion of the LRE codes, that are part of the December 1 child count, differed from our interpretation and data reporting. This discrepancy has also been noted in our conversations with State personnel. In our opinion, it is easy to understand how errors in data reporting could occur, especially when differentiating between a child’s service placement in a general education setting and where the majority of special education
services are provided. There were many children who received both ‘push-in’ and ‘pull-out’ services, providing a situation in which errors can be easily made.

Another possible source of error are teachers’ and therapists’ scoring of children’s progress on the ISTAR-KR. In our work evaluating the Early Education Matching Grant Program, we have seen firsthand how easy it is for teachers to incorrectly interpret the presence or absence of a specific skill with little or no training. The current ISTAR-KR lacks clear behavioral descriptions and criteria for scoring each strand correctly, relying considerably on the individual teacher’s knowledge of child development and assessment.

As a result, our first recommendation is to develop and provide statewide training on recording the correct LRE codes. This training could be face-to-face, virtual, or a standalone web-based module. Given the major revisions being made with the ISTAR-KR, we suggest holding off on any training for that tool.

2. Identify the Innovative Early Education Practices You Wish to Promote

As noted at the beginning of this section, effective change cannot occur if the targeted innovative practices have not been clearly identified. Our recommendation is that we build on IDOE’s Every Student Succeeds Framework and identify specific strategies and models for implementing each major component (e.g., collaborative service delivery models, UDL, multi-tiered systems of supports, instruction, etc.) that reflect best practices in early education and early childhood special education.

From our interviews and observations, many of the challenges we identified could easily be addressed by outlining evidence-based service models and practices that keep preschoolers with disabilities in the general education classroom and meet their individual needs. These innovative practices include:

- Collaborative planning, consultative, and co-teaching service models
- Embedded instruction and embedded therapy practices
- Initial and ongoing assessment and progress monitoring to ensure all children learn
- Curriculum that supports important early childhood and kindergarten readiness skills and allows for multiple learning activities
- Universally designed classrooms and instruction that enable young children to access and engage in all learning opportunities
- Professional learning communities or Response to Intervention committees that support individual classroom teachers in problem solving and accessing needed supports

There are three additional considerations to this recommendation. First, it is important that the practices and models to be promulgated have evidence of their effectiveness in early education settings and young children. Many times, K-12 models and practices are pushed down to early education without clear evidence that they are effective and can be implemented well in these environments.

Second, attention needs to be given on identifying effective practices for both special and general early education. Since many early care and education programs operate outside of IDOE, there will need to be some consideration concerning how clear best practices will be identified and adopted for these partners. From our interviews, many community providers may lack the knowledge and skills to support children with learning and behavioral challenges.

Our third consideration concerns the prevalence of pull-out services in districts that report average to above average inclusive efforts. Many Indiana programs who believe in and operate inclusive early childhood programs still rely on pull-out services as a strategy for meeting individual needs, particularly when those needs require more intense intervention. While this consideration can be addressed with
professional development that introduces strategies for meeting more intense needs within the regular early childhood program, a decision concerning the appropriateness and desirability of this more segregated service model will need to be articulated.

3. Establish a Clear Plan that Signals the State’s Readiness for Change.

In the Exploration Stage, Fixsen (et.al., 2013b) emphasizes the importance of creating a sense of readiness for change. As he notes, “What is needed is relevant and detailed information so those who are being asked to change know what is expected, how the process will work, and are ‘ready’ for change.” (p.2) In that paper, Fixsen and his colleagues identify six dimensions which demonstrate States' readiness:

1) A clear and compelling need for change that is important enough to warrant the energy and resources that will be needed to make broad changes is established.
2) There has been clear consideration of what the changes will entail, that the changes (innovations) are demonstrably effective, and that multiple stakeholders have been engaged in the discussion.
3) There are plans for initiating and maintaining the change process that account for risks and build on what already exists.
4) There is a plan for establishing frequent and accurate communication between the state and local education agencies so that there is ongoing feedback among all parties and if any issues arise, they can be addressed in a timely manner.
5) An implementation plan that outlines the resources and infrastructure that will be needed (e.g., professional development) to support state and local efforts in adopting the innovative practices exists.
6) A data collection and reporting plan that can measure and communicate incremental progress (both infrastructure development and student benefits) to all major stakeholders and inform decision making has been created.


Implementation teams are a key ingredient in the implementation science framework. They provide the diverse perspectives and collaborative energy and buy-in needed to support major changes in practices. Since Indiana’s early education systems are diverse and fall under different state and local lead agencies, there is a need to establish an implementation team that includes multiple stakeholders from the various agencies. Such a team can more clearly identify the challenges it needs to address and work together to build on their respective capacities to make and sustainably support the needed changes. Through memoranda of understanding and joint position statements, the state implementation team can communicate the need for change to their respective stakeholders at the local level.

5. Establish a Transformation Zone to Pilot the Proposed Changes in Practices and Policies.

Another key concept Fixsen and his colleagues (2013a) identified for supporting the scaling up of innovative practices is Transformation Zones. While similar in purpose to piloting a new model or practice, Transformation Zones build on this idea to introduce the notion of piloting not only the innovation at the local level, but implementing both the innovation and change process at the local and state levels. This notion of Transformation Zones allows the state to start small, but with a dual focus on
establishing and testing needed infrastructure supports while a small group of LEAs are establishing and testing out both their adoption of the innovative practice and their own local infrastructure supports. Transformation Zones provide invaluable experience and data for testing an innovation and the local and state infrastructures on a small and manageable scale. We recommend that the state consider gradually embracing these changes and this proposed change process using a small number of Transformation Zones to implement, evaluate, and improve practices before undertaking a broader statewide effort.

6. **Complete our Year 1 Work of Examining Kindergarten and Kindergarten Transition Practices.**

Our work exploring preschool inclusion practices in Indiana took up much of our time in the first year. We request permission to continue with our work of examining current kindergarten transition practices that support inclusive services from preschool to kindergarten, as originally put forth in our Year 1 proposal.
References


