Preparing Early Childhood Educators for Blending Practices in Inclusive Classrooms

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Abstract

Preparing early childhood teachers for inclusion requires the blending of high quality developmentally appropriate practices with environmental adaptations and individualized instructional practices. This article describes how a field experience was redesigned to incorporate evidence based practices in teaming and collaboration, environment and instruction. A STEM learning center was the context for this case study on a preservice teacher and preschool child with special needs. Changes to the physical, social and temporal environment set the stage for promoting communication goals and led to increased child engagement and language use. Implications and recommendations for how to structure unified early childhood/early childhood special education teacher preparation programs for blended practices are discussed.

Preparing Early Childhood Educators for Blending Practices in Inclusive Classrooms

High quality early childhood programs, comprised of developmentally appropriate materials, activities and interactions, are the foundation for learning and development for all young children (Sandall & Schwartz, 2008). Inclusive early childhood programs and services are defined by the features of access, participation and supports (DEC/NAEYC, 2009). Access requires teachers to remove barriers and provide a wide variety of ways for children to take part in activities. Participation is more likely when teachers use instructional approaches that promote engagement in play and learning activities. Supports take many forms including ongoing professional development and communication and collaboration between professionals and families. All these components are needed in order for young children with special needs to benefit from inclusion.

Since the 1990’s many states have developed unified early childhood education (ECE) and early childhood special education (ECSE) certification requirements to prepare teachers for inclusive services. Unified programs are designed to ensure early childhood teachers can work effectively with all children (Lim & Able-Boone, 2005). These early childhood teacher preparation programs include curricula guided by state certification requirements and professional associations including National Association for the Education of Young Children (NAEYC) and Division for Early Childhood of the Council for Exceptional Children (DEC) (Stayton, 2015). Supervised field experiences in inclusive settings with children with diverse abilities are an invaluable part of the preparation experience. Through coursework and field experiences that infuse diversity, early childhood (EC) preservice teachers develop knowledge and skills in planning developmentally appropriate curriculum and making modifications and adaptations to increase opportunities for each child’s meaningful participation.
A challenge for unified teacher education programs is how best to design field experiences requirements so that preservice teachers are prepared to work with children with diverse needs in a variety of settings. Specialized instruction within inclusive environments is often necessary in order to meet the unique needs of young children with disabilities (DEC/NAEYC, 2009; Division for Early Childhood, 2014). Preservice teachers can benefit from field experiences that model emerging practices such as peer coaching, professional learning communities, and school based data teams to ensure that teachers receive ongoing support that is specific to their needs and provided from individuals with different areas of expertise (Vescio, Ross, & Adams, 2008).

The purpose of this article is to describe how a unified early childhood teacher education program incorporated evidence based Division for Early Childhood recommended practices (DEC-RP) to enhance a field experience in an inclusive preschool classroom. This article describes a case study in which a preservice teacher implemented practices related to environment and instruction and teaming and collaboration when designing a STEM (science, technology, engineering and math) learning center in an inclusive preschool. The effects of using selected DEC-RP on the preservice teacher’s use of language facilitation strategies and the target child’s engagement and interactions are shared. The final section provides recommendations for early childhood/ early childhood special education teacher preparation programs when considering how to incorporate evidence-based practices in coursework and field experiences.

**DEC Recommended Practices**
Preservice teachers in early childhood special education benefit from field experiences that demonstrate the use of evidence based practices to provide high quality services to children and families. Professional organizations support teacher preparation programs by translating research into practice and by disseminating information on evidence-based practices. In 2014 the Division for Early Childhood of the Council for Exceptional Children revised their recommended practices (DEC-RP) to support young children with special needs. In this study the DEC-RP were studied and selected practices on environment, instruction, and teaming and collaboration were intentionally incorporated into a field experience in an inclusive preschool classroom. Table 1 lists the recommended practices that were targeted for this field experience.

Table 1. Division for Early Childhood Recommended Practices (DEC-RP) incorporated into a Unified Teacher Education Program Field Experience

<table>
<thead>
<tr>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1. Practitioners provide services and support in natural and inclusive environments during daily routines and activities to promote the child’s access to and participation in learning experiences.</td>
</tr>
<tr>
<td>E2. Practitioners consider Universal Design for Learning principles to create accessible environments.</td>
</tr>
<tr>
<td>E3. Practitioners work with the family and other adults to modify and adapt the physical, social, and temporal environments to promote each child’s access to and participation in learning experiences.</td>
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**Instruction**

INS1. Practitioners, with the family, identify each child's strengths, preferences, and interests to engage the child in active learning.

INS2. Practitioners, with the family, identify skills to target for instruction that help a child become adaptive, competent, socially connected, and engaged and that promote learning in natural and inclusive environments.

INS3. Practitioners gather and use data to inform decisions about individualized instruction.

INS4. Practitioners plan for and provide the level of support, accommodations, and adaptations needed for the child to access, participate, and learn within and across activities and routines.

INS5. Practitioners embed instruction within and across routines, activities, and environments to provide contextually relevant learning opportunities.

INS6. Practitioners use systematic instructional strategies with fidelity to teach skills and to promote child engagement and learning.

**Teaming and Collaboration**

TC1. Practitioners representing multiple disciplines and families work together as a team to plan and implement supports and services to meet the unique needs of each child and family.

TC2. Practitioners and families work together as a team to systematically and regularly exchange expertise, knowledge, and information to build team capacity and jointly solve problems, plan, and implement interventions.

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**Context of the Study: Early Childhood STEM Learning Center**

Developmentally appropriate and integrated curriculum provides a context that engages and encourages the meaningful participation of all young children. In our unified teacher education program preservice teachers are placed in diverse preschool classroom the semester before student teaching. They are expected to design and implement a physical science STEM learning center in which they demonstrate both teacher led and child initiated learning. The preservice teacher is expected to support child inquiry by taking on the role of a facilitator who organizes the environment, observes children’s interests closely, asks questions and poses problems to engage children and further their theory building (Chaille & Britain, 2003). Physical science activities (i.e., water dynamics, ramps and pathways, air dynamics...) are ideal for diverse learners because children can interact directly with objects and materials and immediately observe how they respond (Hoisington, Chalufour, Winokur & Clark-Chiarelli, 2014; Donegan-Ritter, 2015; Zan & Geiken, 2010). Physical science activities allow young children to engage in science concepts, and have experiences with force and motion which fosters a beginning understanding of how the world works. In this study the preservice teacher planned and implemented a ramps and pathways learning center (Counsell et al., 2015; DeVries & Sales, 2010; Zan & Geiken, 2010) that provided ample opportunity for young children to engage in hands on physics investigations.
Blending Practices
Blended practices (Grisham-Brown, Hemmeter, & Pretti-Frontczak, 2005; Pretti-Frontczak, Grisham-Brown, & Sullivan, 2014) refers to combining the use of evidence based, recommended practices for children with special needs (Division for Early Childhood, 2014) within the context of high quality early childhood curriculum. In this article a STEM learning center was the high quality curriculum that was planned to reflect the principles of Universal Design for Learning (UDL). The Framework for Response to Intervention, developed by DEC, NAEYC and NHSA (2014), is a multi-tiered system of support that our early childhood teacher preparation program used to design the preschool field experience. The following is a discussion of how each of the three tiers, high quality curriculum with UDL, adaptations to the environment, and individualized instruction, are essential for meeting the needs of children with special needs in inclusive settings.

Tier 1 high quality curriculum with UDL. High quality developmentally appropriate curriculum is the starting point, critical for children’s successful outcomes, but it is also not enough to engage all children. Using the principles of universal design for learning (UDL) early childhood teachers design the social environment and deliver instruction so that young children with the widest range of abilities can participate according to their individual strengths (Conn-Powers, Cross, Traub, & Hunter-Pishgahi, 2006). In inclusive classrooms this requires teachers pre-planning or pre-thinking about the activity and the abilities and needs of all possible learners in order to provide multiple means of representation, expression and engagement (Center for Applied Special Technology, 2011). UDL is a process by which curricula is more accessible to all children by intentionally designing learning activities from the beginning to address individual differences (CAST, 2011). As teachers plan learning activities, the UDL framework provides them with multiple options to present content, gather feedback and recruit interest in the planned activities.

Tier 2 adaptations and modifications. Because children with disabilities spend less time actively engaged with adults, peers and materials than children without disabilities (McWilliam & Bailey, 1995), adaptations or changes are often needed to support their meaningful participation. Preservice teachers need to be intentional about arousing particular children’s attention, curiosity and motivation to participate in classroom activities. An important way to promote engagement is to identify children’s strengths, interests, and preferences and to use those child preferences to plan classroom and community activities that encourage communication and interaction (Hancock & Kaiser, 2006; Division for Early Childhood, 2014). In order for children with special needs to have access and participate in learning centers and other activities, environmental adaptations have to be made. Adaptations to the physical, social and temporal environment are needed so that instructional strategies can be planned and implemented. According to DEC-RP (2014), physical environment includes space, equipment and materials; social environment encompasses interactions with peers and family members; and the temporal environment includes for how long and when routines and activities take place. Tier 2 involves monitoring children’s ongoing interests and preferences and then modifying various features of the environment to foster children’s engagement and learning.
**Tier 3 individualized interventions.** The goals on the individual education plan (IEP), developed by the family and a multidisciplinary team, create a need for intentional planning to select and address the goals with ongoing data collection for monitoring of progress. Embedded instruction, considered an evidence based practice in early childhood settings, is individualized and intentional teaching that takes place during child initiated activities when a child is engaged in a chosen activity that presents an opportunity to teach a target skill (Daugherty, Grisham-Brown & Hemmeter, 2001; Grisham-Brown, Pretti-Frontzak, Hawkins, & Winchell, 2009; Grisham-Brown, Schuster, Hemmeter & Collins, 2000).

Planning for embedding IEP goals for children requires a collaborative planning process in which a team reviews the IEP and selects target goals. According to DEC (2014), group facilitation strategies are used to enhance team functioning so that all viewpoints are shared. Tier 3 involves this highest level of collaborative planning to ensure that children’s IEP goals are addressed across a wide range of school activities and routines.

**Case Study: Sue and Theo**

In this case study about Sue and Theo, practices in each tier, high quality universally designed curriculum, adaptations to the environment, and individualized instructional interactions, were blended through collaborative teaming so that Sue, a preservice teacher, could increase a child’s meaningful participation in a STEM learning center.

**Sue, the Preservice Teacher**

With little to no previous experience working with children with special needs, and in her last semester of coursework before full time student teaching, Sue is an early childhood major whose unified endorsement, “Teacher Prekindergarten through Third Grade – Including Special Education” means she is expected to work effectively with children who are typically developing and children who have special needs. She needs to be able to plan and implement both adult directed and child initiated learning experiences. In her future inclusive classroom, she will have to individualize instruction and learn to collect classroom data according to an IEP.

Sue was placed in an inclusive publicly funded preschool classroom for her 10 week, 40 hour supervised field experience (two hours, twice a week). As part of the course requirement, Sue planned integrated curriculum for a STEM learning center based on ramps and pathways for an hour twice a week. While facilitating the learning center, Sue provided varying lengths of wooden cove moldings and an assortment of objects that roll and slide for children to experiment with how objects move on inclined surfaces.

**Theo, the Target Child**

One of the students, Theo, was age 4.11 at the start of this study. A happy, outgoing and determined boy, he enjoyed songs, dancing to music, looking at books, coloring on the easel and playing with cars and trucks. He had multiple needs that were addressed on his IEP including behavior concerns, communication delays, and physical motor impairments. He experienced a stroke as an infant that limited the use of his left leg and arm (left hemiplegia). In the area of expressive communication, he was able to produce 1-2 word utterances for labeling. He repeated
words but had difficulty expressing his wants and needs and feelings to others. His priority IEP communication goal was to use three word utterances to make requests and gain attention.

**Before the Collaborative Planning Intervention**

_Sue is frustrated that, although Theo seems interested in the ramps and pathways learning center that she planned, he is only staying at the ramps center for a very short time. He uses ramps other children build, but hasn’t built ramps on his own yet. He can’t use marbles without putting them in his mouth. Sue has introduced other items like small balls and plastic eggs in order to get him interested. Sue would like him to stay at the ramps center for longer periods. She thinks it would be great if he could build his own ramp set._

Preservice teachers like Sue, who had limited experience working with children with special needs, need support in order to promote meaningful participation and address IEP goals. For this study, support came in the form of a team composed of speech and language therapy graduate students and an early childhood special education faculty member who worked together with Sue to promote IEP communication goals for Theo.

**Data Collection**

The speech and language therapy graduate students worked as research assistants with the first author. They videotaped classroom observations of Sue interacting with Theo on three separate occasions for 45 minutes during center time as she facilitated children’s explorations and interactions with materials in the ramps learning center. Theo and the other children moved freely around the classroom. The videotapes allowed any and all interactions between Sue and Theo and peers in the learning center to be transcribed and subsequently coded. Videotaped observations of EC student teacher-child interactions during the learning center were conducted before the collaborative planning meeting and two times following the coaching meeting. Data was collected from videotapes to inform team decisions about how to embed IEP goal instruction during the STEM learning center.

**Data Analysis**

The interactions that took place between the preservice teacher and the target child and other peers who were present were transcribed and analyzed to determine how long Theo was engaged in the learning center and the extent to which Sue used language facilitation strategies to support Theo’s social communication. Sue’s use of language facilitation strategies were monitored using a frequency count. The type of target child’s social communication (i.e., nonverbal, vocal, verbal) and type of language facilitation technique (question, parallel talk, repetition, expansion) were coded. In addition, the duration of the Theo’s engagement at the learning center was measured.

**Collaborative Planning Intervention**

Following the first videotaped observation Sue met with the graduate students in speech and language therapy and a faculty member with expertise in ECSE to share observations, review the IEP, select a priority IEP communication goal and develop a plan for addressing the IEP goal during the STEM learning center. After sharing observations the team realized that Sue’s interactions with Theo were impacted by the limited amount of time Theo engaged with ramps in the busy classroom at the popular ramps center. Table 2 shows that during the first observation...
Sue rarely used specific strategies to facilitate language and Theo did not engage in any social exchanges with peers in the ramps center. He had difficulty moving the two and three foot long, one inch wide cove molding into the desired position and he could not readily pick up the marbles that were used in the learning center. The presence of at least four or five peers coming and going resulted in Sue being distracted from supporting his efforts to use the materials.

The team concluded that barriers existed in the learning center environment which included the type of materials and presence of too many peers at the same time. Theo had difficulty safely carrying the long narrow cove molding used for ramps. Waving the ramps in air was a safety concern. In addition, the concentration of so many peers prevented Sue from supporting his engagement in the physical science learning center. When Theo did not have Sue’s attention he walked away.

The team brainstormed and selected several environmental adaptations to the physical, social and temporal environment to increase his engagement. Adaptations to the physical environment were a) use larger objects including cars and balls, b) use bigger and lighter ramps (i.e., plastic rain gutters), and c) move the ramps and pathway center to a quieter, less traffic area. Adaptations to the social environment included a) select one patient peer to play with him at first, and b) gradually increase number of peers. A temporal adaptation was to invite him to come to the ramps center upon arrival so there are fewer peers and distractions.

The IEP for Theo was reviewed. His strengths, preferences and delays in physical motor skills and expressive language were considered. The goals that the team, including his family, developed for the year were discussed. A priority goal that could be addressed during the ramps learning center was identified: Theo will produce 2-3 word utterances in the classroom to gain attention, make requests and communicate wants and needs.

The speech and language pathology graduate students shared information on responsive interaction strategies (Weitzman & Greenberg, 2002) which are part of Learning Language and Loving It program (Girolametto, Weitzman, Lefebvre & Greenberg, 2007). The specific language facilitation strategies that Sue could use with Theo were: a) withhold something he wants, then prompt him to make requests; b) repeat what he says and expand on it; and c) use parallel speech (i.e., talk about what he is doing).

**Following the Collaborative Planning**

On two subsequent field experience days Sue was videotaped interacting with Theo in the classroom. Sue arranged the social environment so that there was only one peer present with Theo in the ramps and pathways learning center. At the suggestion of the team she used lightweight, six inch wide plastic gutters for ramps and larger plastic cars and textured rubber balls for easier manipulation of materials. As shown in Table 2, the combined use of environmental adaptations and language facilitation strategies resulted in positive gains in length of engagement. Theo’s length of engagement increased over the course of the field experience from 2:30 minutes at the start to over five minutes after collaborative planning. This longer engagement and the collaborative team planning enabled Sue to use more language facilitation strategies, an increase from using one strategy at the start to using 8 and 11 strategies following collaborative planning.
Table 2
Interactions between Sue and Theo during Ramps and Pathways Learning Center

<table>
<thead>
<tr>
<th>Observation #/Learning Center</th>
<th>Duration of target child engagement in learning center</th>
<th>Frequency of EC teacher use of language facilitation</th>
<th>Frequency and type of child interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Ramps and Pathways (5 peers present)</td>
<td>2:30</td>
<td>1</td>
<td>1 No response 0 peer interactions</td>
</tr>
<tr>
<td>Collaborative Team Meeting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) Ramps and Pathways (1 peer present)</td>
<td>5:05</td>
<td>8</td>
<td>3 nonverbal 3 verbal 2 peer interactions</td>
</tr>
<tr>
<td>3) Ramps and Pathways (3 peers present)</td>
<td>5:50</td>
<td>11</td>
<td>4 nonverbal 4 verbal 3 peer interactions</td>
</tr>
</tbody>
</table>

The following recounts how Sue changed the social and physical environment and used language facilitation strategies after the collaborative planning meeting:

*Sue set up two 6 inch wide, two foot long plastic gutters, large cars and balls in the ramps center. At the start of center time Sue invited Theo and one peer, Mike, to the ramps center.*

*Sue: Come on in. Would you like to use a car or a ball (holds one in each hand)?*

*Theo: (starts to reach for ball)*

*Sue: Can you tell me?*

*Theo: Ball*

*Sue: Ball. Would you like to use orange ball? What do you want to do with the orange ball? What’s Mike doing? Look at that go!*

*Theo: Hey, Mike watch (approaches plastic gutter with orange ball)*

*Sue: Mike, can you watch your friend Theo?*

*Theo: (puts ball on ramp)*

*Sue: Look at that, He’s rolling it down. Do you think this ball will roll differently? (hands him different texture ball)*

*Mike: If you do this the ball will hit the box*

*Sue: Did it hit the box?*

*Sue: Theo, would you like to try the car? (Theo takes green car from Sue and puts it on the gutter)*

*Sue: Is it a green car?*

*Theo: crash*

*Sara: Did the car crash into the box? Do you want to try it again? (Theo does the same thing as Mike)*

*Sue: Wooah Theo! You made the box roll over!*
Discussion

This case study illustrates the impact of blending evidence based practices related to arranging the environment, embedding instruction and team collaboration on enhancing a young child’s meaningful participation in an inclusive classroom. To support Theo’s participation adaptations were made to the physical environment (i.e., moving the space and replacing materials), the social environment (i.e., reducing the number of peers and selecting specific peers to interact with him) and the temporal environment (i.e., adjusting the schedule and length of activities).

According to Catalino and Meyers (2015), environment, which cannot be separated from other topic areas, serves to either facilitate or inhibit opportunities for children to have access to classroom activities. In order to engage Theo in classroom activities Sue needed to arrange the environment to support his engagement. As a result of collaborative planning, materials were replaced (i.e., one inch cove molding was replaced by 6 inch wide plastic gutters and the marble were replaced by plastic cars that fit his hands and were of high interest). The learning center was moved from a high traffic area to a quiet corner. The social environment was adapted by reducing the number of children present when Theo was at the learning center. In addition, specific peers who he liked and who shared common interests were present. And finally, the schedule was changed so that he could go to the ramps center when he first arrived because it was less crowded.

Theo’s IEP goal was addressed by Sue using embedded instruction, the use of short systematic instructional interactions within the context of a STEM learning center. According to Horn, Lieber, Li, Sandall, and Schwartz, (2000) learning opportunities should be possible in nearly all classroom activities to help young children develop meaningful skills. By incorporating DEC-RP, a preservice teacher was given the support through collaborative planning, to arrange the environment and then embed instruction of an IEP language goal.

It is rare that undergraduate students have an opportunity to collaborate with professionals from other disciplines. (Horn, Hyson & Winton, 2013; Odom, Buyssee & Soukakou, 2011). Although EC preservice teachers report positive views toward collaboration, they do not often have formal opportunities to collaborate with professionals from other disciplines (Frankel, Hutchinson, Burbridge & Minnes, 2014). Improving the ability to function as a member of a professional community during early childhood teacher education holds promise to increase problem solving opportunities and ultimately improve teacher retention (Anderson, 2013). The following section provides recommendations for how teacher preparation programs can prepare early childhood teachers to support children with disabilities within inclusive learning environments.

Recommendations for Preparing Early Childhood Teachers for Inclusion

Personnel preparation programs are under increasing requirements to ensure that teachers are prepared to implement practices that are based on research evidence and produce positive outcomes for students. In fact, recent federal legislation requires that teacher education programs collect performance based measures to indicate whether their graduates are ready to succeed in the classroom (U.S. Department of Education, 2014). While the case of Sue and Theo is promising, research indicates that many preparation programs fall sort of preparing teachers to apply practices that are based on professional association standards (Chang, Early & Winton,
Preparing teachers to implement DEC-RPs that produce positive outcomes for young children will require changes in several aspects of teacher preparation programs. Four specific methods that were illuminated in Sue’s case study are described next.

1. **Incorporate resources supporting the use of DEC recommended practices throughout unified teacher preparation coursework and practicum experiences.** This first recommendation is consistent with both current policy and practice within early childhood teacher education. The accessibility of websites such as the IRIS Learning Center and Technical Assistance Center for Social and Emotional Interventions allow early childhood preservice programs to increase their emphasis on DEC-RPs, such as modifying the schedule and space for classroom activities, and well as the materials, number of peers, and forms of teacher support. Moreover, teachers in preparation should have multiple opportunities to apply and learn these practices within the context of structured field experiences. Sue’s example illustrated the opportunity to receive hands on experience teaching Theo and learning to implement environmental practices to support his participation in a routine activity and address specific IEP goals related to language and communication. Moreover, Sue had the opportunity to collaborate with a team that included graduate students in speech and language therapy and a faculty member in ECSE. The team also participated in high quality collaboration by observing the video of Sue and Theo, reviewing Theo’s IEP, identifying and removing environmental barriers, selecting a communication goal, and developing a plan for addressing the IEP goal during the STEM learning center. This case study illustrates the need for teacher educators to be intentional about incorporating recommended practices in specific elements of their programs.

2. **Foster Ongoing Collaboration and Partnerships to Support Teacher Preparation.** A number of individuals have recommended interdisciplinary collaboration in teacher preparation over the past 20 years (Miller & Stayton, 2006; Winton, 2000). Despite these recommendations, research indicates that collaborative approaches to personnel preparation has been the exception rather than the rule, as many programs encompass fragmented efforts from university faculty, staff, and cooperating teachers (Bruder & Dunst, 2005; Mellin & Winton, 2003). However, preparing early childhood teachers to collaborate with others has become even more important over the past ten years with the establishment of Response to Intervention, professional learning communities, and school-wide data teams. This case study illustrates how an undergraduate preservice teacher engaged in team meetings with graduate students in speech and language pathology and an ECSE faculty member. This collaboration was structured around key activities or processes such as examining a child’s IEP and selecting goals to focus on, viewing sessions from the classroom and recommending practices to implement, and using data to make informed decisions. Such processes are essential components of school based professional learning communities and data teams and are recommended by professional associations such as the Council for Exceptional Children. Despite the obvious importance, there are a number of significant barriers to incorporating interdisciplinary teaming and collaboration into personnel preparation programs. These include divergent beliefs or orientations that different professionals have on early intervention and the longstanding tendency for academic departments to operate independently of one another. An integral element of high quality early childhood preparation programs is ensuring that preservice
teachers have opportunities to collaborate and partner with families from diverse backgrounds, teachers who work in a variety of community settings and professionals from different disciplines (Lim & Able-Boone, 2005).

3. Focus on preservice teachers’ ability to produce measurable improvements in children’s engagement, language, and other developmental skills. As noted earlier, a primary goal of preparation programs is to prepare teachers to implement practices that are supported by research and recommended by professional organizations. The rationale for implementing these practices is to produce improvements in children’s learning, developmental progress, and success in school activities. Sue’s case study illustrated how preservice teachers can focus on producing improvements in children’s learning and related outcomes. First, Sue and her team identified skills/goals that would be appropriate to address within the context of the STEM activity. Based on observations and examination of the IEP, the team focused on improving Theo’s ability to use materials (ramps) appropriately and engage in positive interaction/communication with his peers. The team then examined videos of Sue attempting to support Theo’s appropriate participation in a routine classroom activity. A simple recording system was developed to code the duration of time that Theo was engaged in the activity, the number of language facilitation strategies that Sue utilized, and the frequency of social overtures that Theo directed to his peers. The team examined and considered these data to identify environmental practices that Sue could implement to support desired outcomes for Theo. Moreover, the team utilized videos and data from subsequent sessions to determine the overall effectiveness of their efforts and make modifications such as decreasing the number of peers in the activity with Theo. This ongoing focus on monitoring and addressing discrete measures is essential for teachers to implement practices that have positive outcomes for children. The videotape and data enabled the team to be precise in their focus and evaluation of success.

4. Provide ongoing supports for preservice teachers’ implementation of high quality practices. A fourth component that is necessary for preparing teachers to implement high quality practices is the ongoing provision of coaching, feedback, and support (Scheeler, Ruhl, & McAfee, 2004). Sue’s team of graduate students in speech and language pathology and a faculty member in ECSE provided Sue with support in the form of encouragement, suggestions, and feedback. The use of videotaping ensured that the team was able to observe Theo’s performance, take note of the practices that Sue implemented, and collect specific data for both of these measures. Moreover, the interdisciplinary nature of the team ensured that Sue benefitted from individuals with expertise in special education and speech and language pathology. As an active participant on the team, Sue was also able to share her perceptions and contribute to the group’s decision about the practices to implement with Theo.

Both Sue and Theo benefitted from using evidence based practices related to the environment, instruction and teaming and collaboration. Sue describes the language and social benefits for Theo:

*I think he benefited not only by increasing his language but also his social skills with the kids. That was great to see and he was getting so excited about coming to the ramps and pathways center. When I first started he would come in briefly but he wasn’t really engaged and then once we started doing smaller group and really focusing on the*
materials and interesting him in what was going on he loved it. Every morning he would come up to me and say “Sue, Sue. Ramp, ramps.” It was really awesome.

References


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