

Meaningful and Engaging Learning Experiences in Early Childhood Special Education Preparation Programs

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ABSTRACT

The personnel preparation of early intervention/early childhood special educator (EI/ECSE) candidates is a pivotal stage in supporting the development of professionals who can effectively work with young children with and at-risk of developmental disabilities, their families, and other service providers. This process encompasses a multifaceted approach to equip candidates with knowledge, skills, and attitudes/dispositions to successfully work within the field. This compilation article includes multiple authors of each section who share strategies, assignments, tools, and experiences to center the Initial Practice-Based Standards for Early Interventionists/Early Childhood Special Educators (Division for Early Childhood [DEC] of the Council for Exceptional Children [CEC], 2020; hereafter referred to as the EI/ECSE Standards) and DEC's Recommended Practices (RPs). These strategies are shared through a "spiraling curriculum" framework, and progress from an awareness level to reflection of candidates' own practice. In addition, this article shares related resources to consider in planning for innovative coursework and practicum/student teaching opportunities. Specific examples of spiraling experiences to deepen learning through opportunities to introduce content aligned to RPs and EI/ECSE Standards are included.

KEYWORDS

Division for Early Childhood, early childhood special education, early intervention, educator preparation, DEC Recommended Practices, university coursework

The Division for Early Childhood (DEC) published Recommended Practices (RPs) for practitioners working with children and families at risk for or having identified disabilities, with an intention to help bridge research to practice (2014). They have been revised three times since the original publication in 1991 (DEC, 2022) and include eight different topic areas: (1) Leadership; (2) Assessment; (3) Environment; (4) Family; (5) Instruction; (6) Interaction; (7) Teaming and Collaboration; and (8) Transition. In addition to the RPs, the DEC recently published the EI/ECSE Standards (2020). The EI/ECSE standards outline key content knowledge, experiences, skills, and dispositions and were developed in collaboration with ongoing input from the field at large. There are eight EI/ECSE Standards, including: (1) Child Development and Early Learning; (2) Partnering with Families; (3) Collaboration and Teaming; (4) Assessment Processes; (5) Application of Curriculum Frameworks in Planning of Meaningful Learning Experiences; (6) Using Responsive and Reciprocal Interactions, Interventions, and Instruction; (7) Professional and Ethical Practice; and (8) Field and Clinical Experience, with specific components described under each standard. Utilizing the RPs and EI/ECSE Standards in tangent provides a solid foundation for development of well-prepared personnel in the field.

Many curricular approaches can (and should) be considered in designing experiences and assignments that are relevant to recommended practices and dispositions in the field. A spiral curriculum approach supports candidates' depth of understanding of curricular content while also allowing for adequate time and competency in

TABLE 1: Example of Planning for Topic Areas

Week	RP Topic Area	Site/Guests*
1	Environment	Sunshine Center for Children Director of Education ECSE
2	Instruction	Sunrise School of Denver Executive Director Director of Inclusion
3	Assessment	Child Find - Lakeview School District Child Find Director ECSE Speech Language Pathologist (SLP)

*all site names are pseudonyms

meeting the EI/ECSE Standards. Spiral curriculum (Bruner, 1960) refers to a model in education in which a concept, theme, or subject matter is taught progressively and repetitively. The process reinforces ideas over time, which contrasts with attempting to learn all at once (Harden & Stamper, 1999). This includes a continuous revisiting of topics, with the level of difficulty gradually rising, and each new learning opportunity builds on the one that came before. The benefits of a spiral curriculum are its characteristics—reinforcing, evolving complexity, incorporation of stages and building from one to the next (Harden & Stamper, 1999).

For purposes of organization and structure, the assignments and learning experiences in this article approach this “spiraling” through three distinct and successive categories: awareness learning experiences, application learning experiences, and self-reflection learning experiences. Each category includes experiences aligned to both DEC RPs and EI/ECSE Standards. In a final section, innovative platforms and approaches are presented that can be used with a variety of content. At the end of each section,

a table is included that maps corresponding RPs and EI/ECSE Standards relevant to the described experience.

AWARENESS EXPERIENCES TO INTRODUCE THE RPS

The first type of learning experiences in this section involve introduction and awareness of the RPs and related content to EI/ECSE candidates. This introduction supports candidates in becoming familiar with the language, how they are organized, and key components/content of each. The RPs are currently available in English and Spanish, which allows for affirming candidates’ home language and potentially increases comprehension by allowing them choice in which language they access them. Introductory and awareness experiences are important components of building foundational knowledge and competency early in preparation coursework.

Awareness Learning Experience: Guest Speaker Seminars

Although candidates build some basic understanding of the RPs by reading them, they become more meaningful when they begin to see the wide variety

of ways that they are implemented in the field. Since multiple visits to programs are challenging and can be impossible in a virtual context (with candidates from multiple geographic areas), inviting guest partners and organizations to come and present over virtual platforms (e.g., Zoom) around an RP topic area in practice provides an opportunity for candidates to begin more deeply to understand the RPs.

In this design, a selected course or seminar series is intentionally planned to focus on one topic area per session. The faculty member then identifies and invites local partners to share information about their program in alignment with the corresponding RP topic area (see Table 1). As an example, during a week about the “Environment” topic area, candidates might hear from a director of education and classroom teachers in an inclusive program about specific examples of how they adapt an environment to be accessible for children who are blind or visually impaired. The program is invited to bring artifacts (e.g., photos and/or videos, tools, etc.) of the topic area in practice.

As the guests share, candidates observe “real life” application of the RPs in action which helps them concretely understand how to implement them in practice. During the presentation, candidates utilize a note taking form to capture ideas/examples of how they saw the RPs in action. This form would include the focus topic area RPs with space to take notes under each (see Table 2). At the end of the session, candidates reflect on what they observed aligned with each RP with a partner.

An additional benefit to this structure is a reciprocal benefit to partner sites, as EI/ECSE candidates are exposed to a wide variety of programs that they may not have been aware of previously. This provides an opportunity for exposure of

TABLE 2: Note Taking Example

As you visit with and hear from our guest presenter today, write down examples of how you see each Environment Recommended Practice in action.

E1. Practitioners provide services and supports in natural and inclusive environments during daily routines and activities to promote the child's access to and participation in learning experiences.

E2. Practitioners consider Universal Design for Learning principles to create accessible environments.

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.

TABLE 3: Related DEC EI/ECSE Standards and RPs

Initial Practice-Based Standards for Early Interventionists/Early Childhood Special Educators	Division for Early Childhood Recommended Practices
7.3 Candidates exhibit leadership skills in advocating for improved outcomes for young children, families, and the profession, including the promotion of and use of evidence-based practices and decision-making.	Applicable across all Recommended Practices

the site and future contacts and networks for employment or practicum opportunities.

This course organization and structure aligns with several Professional Practice Tools and within the given structure, allows for exposure to any or all the Recommended Practices (see Table 3). The key feature of this experience is ensuring that explicit connections are made to the practices.

Awareness Learning Experience: Think-Pair-Share Activity

For candidates to fully understand and be ready to apply the RPs in practice, they must have multiple exposures and opportunities to explore the content in different formats. This in-class (or online) activity supports candidates in generating their own ideas, activating prior knowledge, and fostering their learning through engagement in small group discussion. Before this activity, candidates would have had previous

introduction to the RPs (for example, asked to pre-read them before the course session). To begin, the faculty member highlights a specific RP category (for example, "Recommended Practice Family (F1) states, Practitioners build trusting and respectful partnerships with the family through interactions that are sensitive and responsive to cultural, linguistic, and socio-economic diversity."). The faculty member then poses a question prompt related to this RP (for example, "What do you believe is the most critical for building trusting and respectful partnerships with families of young children?" OR "In what ways can you be sensitive and responsive to cultural, linguistic, and socio-economic diversity?"). The faculty member would ask candidates to take some time to "think" about their response. After providing wait time, the faculty member then asks candidates to "pair" with another member of the group for an additional amount of time to discuss their individual ideas when

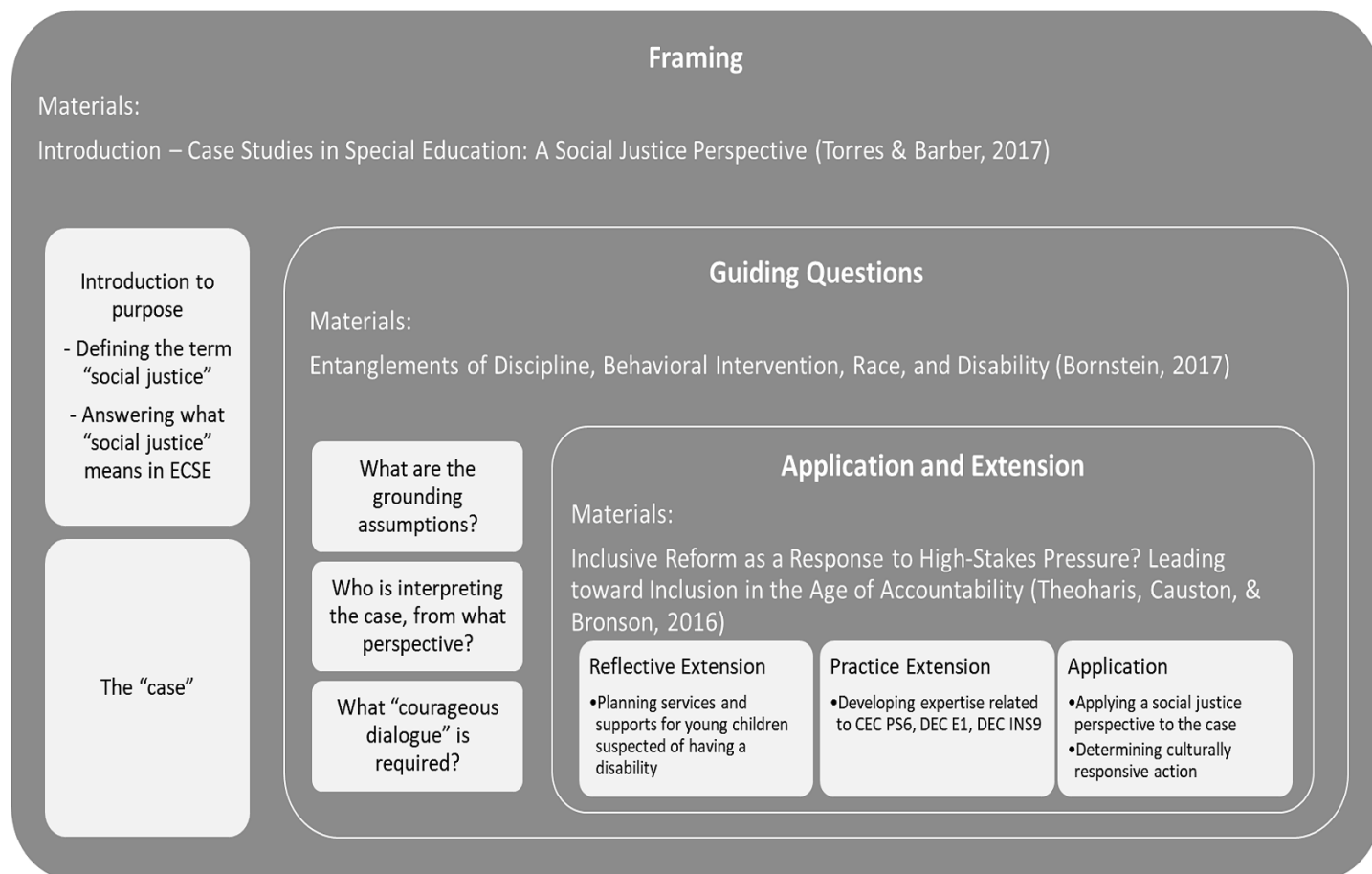
engaging in independent thinking. Finally, the faculty member asks candidates to share with a larger group. Through group participation candidates benefit from enhancing their own and each other's learning (Cloud, 2014; Johnson, 1994; Johnson & Johnson, 2008; Slavin, 2012).

APPLICATION EXPERIENCES: OBSERVING AND USING RPS

After introducing the RPs through various awareness experiences, candidates can begin to deepen their learning through considering how they observe application of the RPs and related practices in a supervised field-based application. Providing opportunities for candidates to extend their learning gives them an opportunity to deeply consider how to apply these practices and use them as professional resources throughout their career.

Application Learning Experience: Case Studies as Catalysts for Culturally Responsive Teaching in Inclusive Settings

Ensuring candidates graduate from institutes of higher education with a culturally responsive lens is an important aspiration of many EI/ECSE preparation programs. However, faculty in higher education settings may not be well equipped to nurture culturally responsive teaching skills in candidates (Ladson-Billings, 2023). In order to better prepare teacher candidates for diverse settings, and in response to a university special education advisory board concern noted below, a case study assignment was developed for an undergraduate special education educator preparation program. The advisory board reported concerns related to educator preparation for early childhood inclusive environments, emphasizing a need for programs to focus on culturally

FIGURE 1: Overview of Case Study Assignment Components, Materials, and Prompts

responsive practices (e.g., setting high expectations for all children, positive relationships with families and communities, involving and including all children, child-centered instruction). Coupled with the fact that young children face suspension and expulsion at alarming rates, especially for certain populations according to national databases and current ECSE literature (e.g., Black children, dual language learners, children with disabilities; Gilliam et al., 2016), there was clearly a need to build an assignment within the program that focused on culturally responsive practices. In other words, university faculty need to provide engaging content and assignments centered on preventative and culturally responsive practices to support young children's behavior to reduce exclusion in early childhood settings, particularly for young children

at greater risk.

To meet an ever growing need to develop candidates' pedagogy, a case study assignment was designed to encourage pre-service candidates to interrogate their own skillset related to young children's behavior, centered on applying a critical lens on discipline practices and the eligibility processes in ECSE. The assignment was designed to support candidates' sense-making of culture, race, disability, and risk in young children.

Case study assignments in educator preparation offer a valuable learning opportunity. Case-based instruction is an instructional approach to help candidates understand new pedagogical content and think about teaching and learning in real-life situations (Lengyel & Vernon-Dotson, 2010). By analyzing real-life situations, candidates can bridge theory and practice, narrow their skills

in a specific topic/practice, and gain insights into the complexity of teaching. The use of case studies in educator preparation programs has been found to provide a platform for candidates to reflect on and examine their practice and ability to adapt to the unique needs of individual children as well as enhance their pedagogical understanding and collaborative capabilities (Brownell et al., 2019; Butler et al., 2006; Kilgo et al., 2014a). Although there are many advantages to using case studies as assignments in educator preparation programs, there are specific challenges to ensuring case studies do not demonstrate an oversimplification of young children's instructional and support needs. Therefore, this case study assignment is built to address several dimensions of diversity. Additionally, as Brownell and colleagues (2019) cautioned, case

TABLE 4: Related Professional Preparation Standards and RPs

Initial Practice-Based Standards for Early Interventionists/Early Childhood Special Educators	Division for Early Childhood Recommended Practices
<p>6.6 Candidates use responsive interactions, interventions, and instruction with sufficient intensity and types of support across activities, routines, and environments to promote child learning and development and facilitate access, participation, and engagement in natural environments and inclusive settings.</p>	<p>Environment 1 (E1): Practitioners provide services and supports in natural and inclusive environments during daily routines and activities to promote the child's access to and participation in learning experiences.</p>
<p>6.7 Candidates plan for, adapt, and improve approaches to interactions, interventions, and instruction based on multiple sources of data across a range of natural environments and inclusive settings.</p>	<p>Instruction 9 (INS9): Practitioners use functional assessment and related prevention, promotion, and intervention strategies across environments to prevent and address challenging behavior.</p>

studies may limit the ability of candidates to practice enacting high-leverage practices. To this end, the case study was designed to include opportunities to allow candidates to expand and apply their learning.

Building a case study assignment can support others in the ECSE community who are navigating similar concerns and challenges, especially considering continued inequitable outcomes and opportunities in inclusive early childhood settings (e.g., National Center on Early Childhood Quality Assurance, 2022). Figure 1 offers a framework for university faculty to build a case study assignment that will provide practical guidance and recommendations that candidates can reflect on and shift their practice to increase inclusion and, thereby, reduce exclusion of young children from early childhood care and education settings. Three components were included in this assignment: (1) framing, (2) guiding questions, (3) application and extension. The purpose of Figure 1 is to support programs to build a case study that analyzes the circumstances of children suspected of having a disability and critically reflect about the relationship of the case to culturally responsive teaching, responses to behavior, and the systemic nature of eligibility processes in special education.

Although the specific details of this

case study assignment cannot be fully captured within the scope of this section, Figure 1 provides a template that can be used when ECSE faculty members want to sharpen the pedagogical purpose of case studies and move beyond simply providing a scenario about a child for general analysis and discussion. The template provides a mechanism for ensuring that candidates understand the pedagogical purpose of the assignment (framing), have an opportunity to cultivate critical perspectives about the case (guiding questions), and make sense of culture, race, disability, and risk in young children (application and extension). In addition, this template can be used across multiple RPs and is aligned with EI/ECSE Standards as well (see Table 4).

In sum, this development and design process for building a critical case study assignment has potential to serve as a model for supporting candidates develop a culturally responsive approach to responding to young children's behaviors and that the resources and recommendations for readers will support university faculty in the adaptation of case study methodology in their programs. This process for building a critical case study assignment can serve as a model for helping candidates develop a culturally responsive approach to responding to young children's behaviors and that the

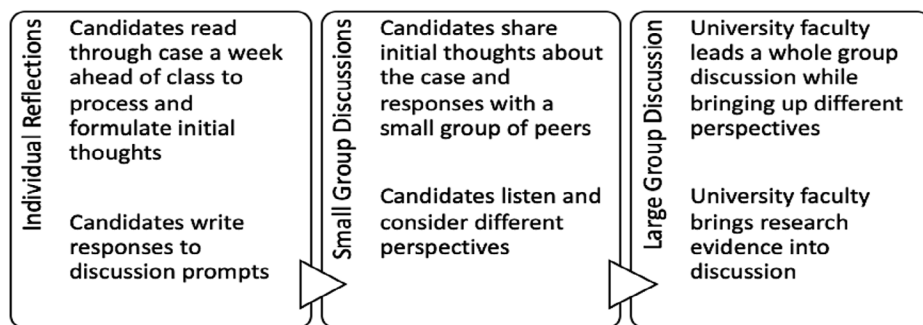
resources and recommendations for readers will support faculty in the adaptation of case study methodology in their programs.

Application Learning Experience: Using Case-Based Instruction to Disrupt Preservice Teachers' Racial Bias in Early Childhood Special Education

Inequities in early childhood education, particularly regarding referrals to special education, impede access to high-quality and inclusive learning environments. Over half of the young children receiving special education services in early childhood are educated in separate environments from their non-disabled peers (U.S. Department of Health & Human Services [DHHS] & U.S. Department of Education [DOE], 2023), further marginalizing young children with disabilities and developmental delays. Educators' attitudes, perceptions, and training strongly impacts referral decisions for special education (Fish, 2019; Woods, 2023), and how educators attend to their instructional decision-making can be in response to explicit and implicit biases (Staats, 2012). One example is racial bias that is seen in the alarming statistics indicating that there is an overrepresentation of Black young children receiving referrals for early childhood special education, particularly Black boys (Cruz & Rodl,

TABLE 5: Summary of Case and Discussion Prompts

<p><i>Tay, an inquisitive 5-year-old Black boy, is in a Kindergarten class with an early career teacher. It appears that when Tay does not know how to proceed with a task, he will loudly ask questions and get out of his seat to find the answer with his peers. During a counting collections task, Tay misses instructions while he picks up the objects he dropped on the floor. The teacher gets frustrated that Tay is crawling on the floor and calls him to the carpet to put his collection back without finishing the task. Tay argues that he wants to finish, tells the teacher how many objects he counted, and pleads with her to explain what he needs to do next. The teacher ignores him and uses his incomplete work on this task as a piece of evidence that Tay needs an evaluation for his classroom behavior.</i></p>
<ul style="list-style-type: none"> • Did the teacher miss an opportunity to evaluate Tay’s counting? How would you have responded? • How would you describe Tay’s behavior in relation to his age and developmental level? • Does the teacher have sufficient evidence to refer Tay for special education services? • What implicit biases might the teacher have, and how do those biases impact her instruction with Tay?

FIGURE 2: Implementation Guide

2018). Black students are more likely to be identified with intellectual disabilities and emotional disturbance more than other disabilities (U.S. DOE, 2020), and the perceived challenges in behavior of Black boys are at a greater risk for disciplinary actions in school (Bradshaw et al., 2010).

There continues to be an emphasis on diversity, equity, and inclusion in early childhood settings that sets the expectation for research informing educator preparation (e.g., DHHS & DOE, 2023). There is a need for educators to have a strong understanding of early child development and knowledge of how factors, such as social, cultural, and linguistic diversity, are considered

when facilitating meaningful learning experiences (DEC, 2020; EI/ECSE Standard 1). Educators must also facilitate equitable access and participation for all children in inclusive settings through culturally responsive and affirming practices and relationships (DEC, 2020; EI/ECSE Standard 6; see Table 6). Educator preparation programs are tasked with helping candidates develop strong equity (Cochran-Smith & Keefe, 2022), which requires candidates to unpack, interrogate, and unlearn harmful educational practices. Since educators play an important role in identifying young children for special education support, it is essential to ensure candidates are equipped with the necessary skills and

critical lens to evaluate (and reframe) how to recognize and respond to their own internal biases. Without building candidates’ strong equity, unproductive and non-inclusive framings, such as “color blindness” and meritocracy, will continue to shape how educators operate (Nasir et al., 2016).

Case-based instruction as a pedagogical approach in educator preparation can help candidates recognize the impact of biases on instructional decision-making and facilitate discussions to challenge and disrupt unproductive framings of young children in classrooms. The use of case-based instruction provides a learner-centered opportunity to practice applying theoretical ideas in the context of real-life scenarios to critique inequities (Moldavan & Gonzalez, 2023). Cases aim to demonstrate real-life examples of the ramifications of candidates’ biases related to race, gender, language, and ability. Strategic discussion questions can accompany the cases to challenge candidates’ perspectives on teachers’ actions and how those actions impact young children. These discussions can also help candidates discuss varying perspectives on the same case and support university faculty in identifying the differences between deficit and anti-deficit noticings that can lead to different outcomes for already marginalized children (Louie et al., 2021). Through the continued use of case-based instruction, candidates can practice anti-deficit noticings and build strong equity.

The example case with discussion questions provided here is framed within the context of a mathematics lesson in a kindergarten classroom (see Table 5). The case was written to demonstrate how racial biases can lead to an inappropriate response as well as influence inappropriate evaluation for special education services.

Figure 2 provides an implementation guide for using case-based instruction

TABLE 6: Related DEC EI/ECSE Standards and RPs

Initial Practice-Based Standards for Early Interventionists/Early Childhood Special Educators	Division for Early Childhood Recommended Practices
1.2 Candidates apply knowledge of normative sequences of early development, individual differences, and families' social, cultural, and linguistic diversity to support each child's development and learning across contexts.	Instruction 3 (INS3): Practitioners gather and use data to inform decisions about individualized instruction.
6.6 Candidates use responsive interactions, interventions, and instruction with sufficient intensity and types of support across activities, routines, and environments to promote child learning and development and facilitate access, participation, and engagement in natural environments and inclusive settings.	Instruction 9 (INS9): Practitioners use functional assessment and related prevention, promotion, and intervention strategies across environments to prevent and address challenging behavior.

with candidates. This process allows the candidates to have a common experience to draw from and reference while continuing to learn more about the impact of racial biases in classrooms.

If we, as the early childhood special education field, continue to let systems exist in their current state, then minoritized groups will continue to experience marginalization and further limited access to high-quality and inclusive educational services (U.S. DHHS & DOE, 2023). Candidates need to know how their interpretation of behaviors of young children and the internal biases in their analysis of such behaviors can impact their instructional decision-making, in turn impacting young children's support and learning.

Application Learning Experience: Utilizing Assessment to Increase Cross Discipline Collaboration

University candidates with related majors in disciplines such as ECSE, SLP, and psychology often express an interest in working with children and families (DeVeney & McKeivitt, 2021). Although the primary focus of this work in early childhood education (birth to age 8) may differ across disciplines, a shared objective is to identify young children in need of additional supports and services to appropriately meet developmental milestones. The importance of gaining

insights from many disciplines with respect to a child's development is well recognized. Guralnick (2000) states, "The interdisciplinary team assessment of young children with possible developmental delays or of those with established developmental disabilities constitutes a critical component of the larger system of services and supports for children and their families during the early childhood years" (p.3).

It may be challenging for university faculty to create assignments that mirror the collaborative process that EI/ECSEs encounter once working in the field as professionals. For example, at the university level, interprofessional educational (IPE) teams may face logistical barriers in terms of transportation or availability or perhaps they are resistant to working with others especially in regard to a high-stakes, graded assignment. Faculty in higher education may be challenged by the time required to design an interprofessional assignment for candidates, or by other institutional demands on their limited time (Ward et al., 2018).

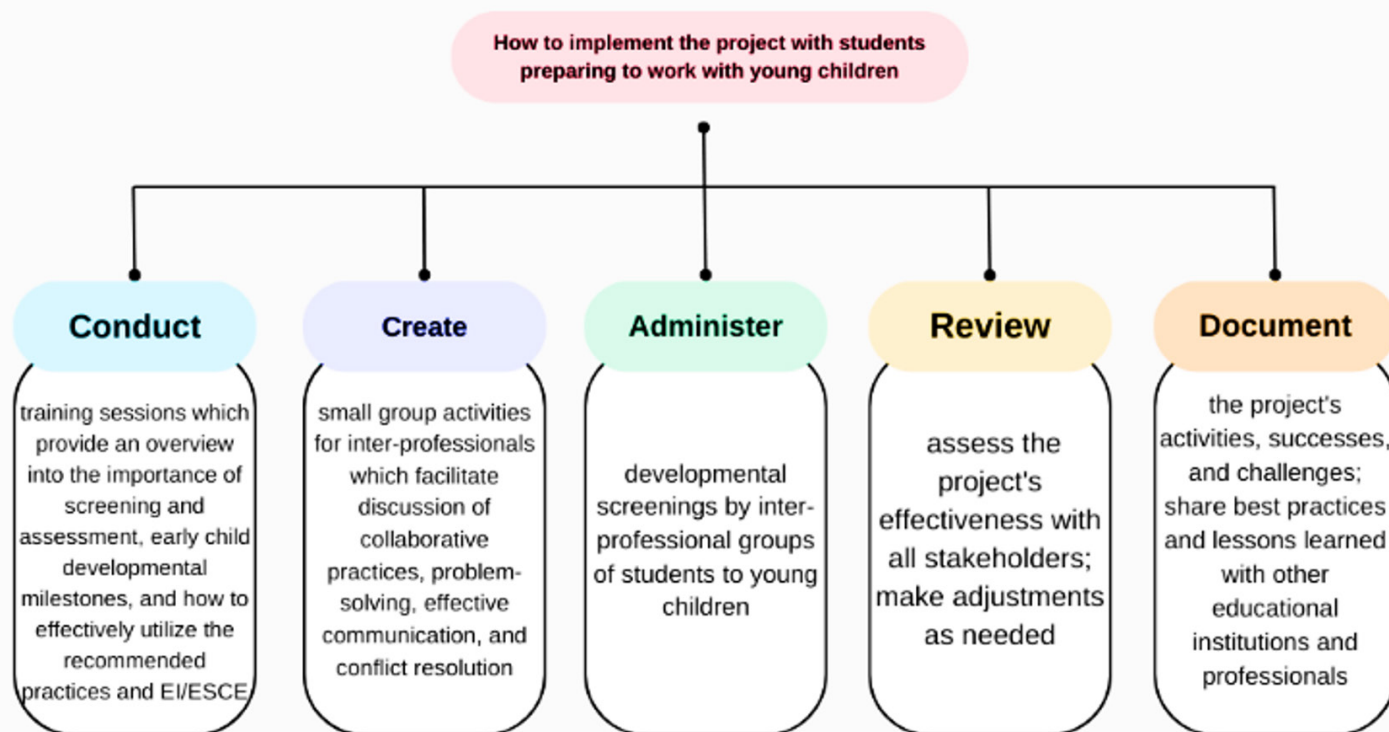
To address these challenges, university faculty from ECSE, psychology, and SLP programs created an assignment that emphasized IPE for university candidates while conducting universal preschool assessments for children within community organizations. To firmly anchor this IPE assignment in best prac-

tice, the university faculty turned to the DEC EI/ECSE Standards and the RPs.

Essential aspects of this project were aligned to EI/ECSE Standards and the RPs. Although the RPs do not explicitly reference interprofessional collaboration, they do provide a framework well-suited for professionals from many related disciplines to partner (Rausch et al., 2021). In this project, university faculty incorporated the RPs and EI/ECSE Standards into their early childhood assessment assignments thereby laying the groundwork for future professional collaborations amongst candidates.

By administering assessment tools in natural environments embedded within daily routines and activities and following the principles of the RPs, candidates appreciated the value of authentic and collaborative experiences while learning about screening tools and best practices. The EI/ECSE Standards and RPs, outlined in Table 7, reflect the framework that informed the university faculty when creating their IPE project, assessing young children in authentic settings, utilizing observation and interviews.

The project also facilitated ongoing communication between members of the assessment team regarding the current functioning and progress of young children in a variety of settings and stressed the importance of collaboration within related but differing professional disciplines. In design, this project encourages

FIGURE 3: Implementation of the IPE Project

novel and innovative approaches for early childhood assessment practices while stressing the importance of adherence to EI/ECSE Standards and RPs. See Figure 3 for additional details about the organization and implementation of this project.

IPE is a critical component and precursor to interprofessional collaborative practice. Interprofessional collaborative practice is one of the most prevalent assessment models used in early intervention (King et al., 2009). In interprofessional collaborative practice, teams of individuals from different disciplines collaborate with one another to complete professional work such as assessment and intervention planning (Kaczmarek et al., 2000; Nash, 2008).

This approach differs from a more traditional model wherein each professional assesses or supports a child individually. An interprofessional model allows all professionals to assess the child synchronously and collectively, which not only eliminates the need

for the child to participate in multiple assessments but provides the professionals with the opportunity to confer and consult with each other in tandem (Grisham-Brown, 2000). Additionally, providing candidates from diverse disciplines with an opportunity to confer and consult with each allows for a team-based problem-solving approach. This IPE team can then dynamically brainstorm solutions to real-world scenarios, effectively demonstrating that there is no “cookbook approach” or single correct answer to a given situation (Kilgo et al., 2014b).

IMPLEMENTATION AND REFLECTIVE PRACTICE EXPERIENCES

After observing others implementing the RPs and EI/ECSE Standards, candidates should begin to implement and integrate these in their own field-based experiences and reflect on their practice. Specific assignments that support candidates in implementing the RPs

while aligning to the EI/ECSE Standards support candidates in understanding the bridge from research to practice. Providing candidates with structures, tools, and experiences to base their reflections on will support them in deepening both reflective teaching and evidence-based practice. Darling-Hammond (2006) describes this as developing “reflective decision makers” in teacher candidates and connects the importance of this disposition to teacher candidates’ learning.

Implementation and Reflective Experience: Literacy Service-Learning Project

In recent years, the field of education has experienced a nationwide shift toward structured literacy, fueled by the science of reading movement. While families of young children are not expected to be reading teachers, EI/ECSEs can work with families to support early literacy development within the context of the child’s natural environment, which is linked to both language and

TABLE 7: Related DEC EI/ECSE Standards and RPs

Initial Practice-Based Standards for Early Interventionists/Early Childhood Special Educators	Division for Early Childhood Recommended Practices
<p>3.2 Candidates use a variety of collaborative strategies when working with other adults that are evidence-based, appropriate to the task, culturally and linguistically responsive, and take into consideration the environment and service delivery approach.</p> <p>3.3 Candidates partner with families and other professionals to develop individualized plans and support the various transitions that occur for the young child and their family throughout the birth through 8 age-span.</p> <p>4.1 Candidates understand the purposes of formal and informal assessment, including ethical and legal considerations, and use this information to choose developmentally, culturally and linguistically appropriate, valid, reliable tools and methods that are responsive to the characteristics of the young child, family, and program.</p> <p>4.4 Candidates, in collaboration with families and other team members, use assessment data to determine eligibility, develop child and family-based outcomes/goals, plan for interventions and instruction, and monitor progress to determine efficacy of programming.</p>	<p>Assessment (A6): Practitioners use a variety of methods, including observation and interviews, to gather assessment information from multiple sources, including the child’s family and other significant individuals in the child’s life.</p> <p>Family (F3): Practitioners are responsive to the family’s concerns, priorities, and changing life circumstances.</p>

literacy readiness (Brown & Sheridan, 2023; Brown et al., 2019). University faculty can provide structured opportunities to support teacher candidates in working directly with families of young exceptional children to promote early literacy development within the child’s natural environment. A substantial body of literature exists that demonstrates the positive impact of family involvement in literacy development (Bruns & Pierce, 2007; Hindman & Morrison, 2011) as well as the role of parents as children’s first teachers (Kelty & Wakabayashi, 2020), and much of the existing literature focuses on shared or interactive reading or engaging in conversation with young children. Given research findings that suggest a positive influence of family involvement in early literacy, sharing information and strategies related to early literacy practices may help engage families further while improving child outcomes (Hindman & Morrison, 2011). The following section will propose a service-learning project designed to empower teacher candidates with early literacy content knowledge (focusing on oral language, concepts of print, and phonological awareness), fam-

ily engagement strategies, and tangible experience serving the families of young exceptional children prior to graduation.

The proposed service-learning project can be incorporated into methods courses or during a clinical experience semester. By this point in their program, candidates should have had several credit hours of courses in reading instruction and content related to family partnership in early childhood. The goal of the project centers on bridging content knowledge of early literacy development with practice engaging families to promote early literacy among exceptional toddlers and preschoolers. The project would require candidates to organize and host a family night within an existing structure in the university, such as a reading clinic, lab school, or early childhood center, or in the context of a field-based placement site. Candidates would present content knowledge of early literacy development in family-friendly, approachable language as well as several examples of strategies that demonstrate how to promote early literacy within several contexts of the young child’s natural environment. For example, candidates may describe how

families can expand on oral language while shopping at the grocery store, playing at the playground, or stacking blocks at home. Parent education opportunities have been shown to engage families in their child’s education, especially when those opportunities prioritize parent participation and responsiveness to their unique needs (Kelty & Wakabayashi, 2020). Parent education opportunities in the form of literacy events or family reading events (Bruns & Pierce, 2007) and parent coaching on literacy strategies and practices (Brown et al., 2019) are also positively linked to early literacy outcomes. However, based on prior research on family outreach, university faculty should consider including the project as a multi-step endeavor to provide more communication and involvement to extend the parent education opportunity (Hindman & Morrison, 2011).

The proposed project also allows candidates to understand better and apply the RPs for working with young children who have or are at risk for disabilities and/or developmental delays. Table 8 presents examples of specific alignment between the proposed project compo-

TABLE 8: Project alignment with the RPs

Project component	DEC Recommended Practice
Family outreach and relationship building	F1. Practitioners build trusting and respectful relationships with the family through interactions that are sensitive and responsive to cultural, linguistic, and socioeconomic diversity.
Information sharing with examples and resources	F2. Practitioners provide the family with up-to-date, comprehensive, and unbiased information in a way that the family can understand and use to make informed choices and decisions.
Model and practice early literacy strategies based on child’s needs	F4. Practitioners and the family work together to create outcomes or goals, develop individualized plans, and implement practices that address the family’s priorities and concerns and the child’s strengths and needs.
Information sharing and practice with early literacy strategies	F5. Practitioners support family functioning, promote family confidence and competence, and strengthen family-child relationships by acting in ways that recognize and build on family strengths and capacities.
Information sharing, modeling, and practice with early literacy strategies	F6. Practitioners engage the family in opportunities that support and strengthen parenting knowledge and skills and parenting competence and confidence in ways that are feasible, individualized, and tailored to the family’s preferences.
Information sharing with examples and resources for oral language development	F8. Practitioners provide the family of a young child who has or is at risk for developmental delay/disability, and who is a dual language learner, with information about the benefits of learning in multiple languages for the child’s growth and development.

TABLE 9: Related DEC EI/ECSE Standards and RPs

Initial Practice-Based Standards for Early Interventionists/Early Childhood Special Educators	Division for Early Childhood Recommended Practices
<p>2.3 Candidates engage families in identifying their strengths, priorities, and concerns; support families to achieve the goals they have for their family and their young child’s development and learning; and promote families’ competence and confidence during assessment, individualized planning, intervention, instruction, and transition processes.</p> <p>3.2 Candidates use a variety of collaborative strategies when working with other adults that are evidence-based, appropriate to the task, culturally and linguistically responsive, and take into consideration the environment and service delivery approach.</p> <p>3.3 Candidates partner with families and other professionals to develop individualized plans and support the various transitions that occur for the young child and their family throughout the birth through 8 age-span.</p>	<p>Environment (E1): Practitioners provide services and supports in natural and inclusive environments during daily routines and activities to promote the child’s access to and participation in learning experiences.</p> <p>See Table 8 for relevant Family RPs</p>

to engage families in early literacy once they work independently in the field while providing tangible support to families and young children. Additionally, a service-learning project focused on early literacy could expose young children to evidence-based literacy practices that improve long-term literacy outcomes due to early intervention at home.

Implementation and Reflective Experience: Self-Reflections Using RPs and Performance Checklists

In order to evolve and progress in their own practice, candidates must build an understanding of and capacity for self-reflection. The capacity to self-reflect and determine strengths and next steps in an educator’s practice is critical for continuous improvement and supporting young children’s learning. It is through reflection that educators become responsive, and it is necessary to develop these skills and dispositions in educator preparation programs (Loughran, 2002).

nents and the DEC RPs, which are also delineated in Table 9.

In conclusion, incorporating a

service-learning project that embeds content and practice holds significant potential to improve candidates’ ability

TABLE 10: Self-reflection prompts

- What are your strengths in each strand? What are some next steps and related goals?
- What resources do you need or do you have available to help meet your goal?
- What was the biggest success/challenge this past semester? How did you approach this challenge? What would you do differently next time?
- How effectively did you implement RPs to support child and family outcomes?
- What RPs worked well in building meaningful relationships with parents/caregivers?
- How did you use feedback from my site supervisor and/or cooperating mentor teacher to enhance my practice?
- In what ways can you further enhance implementation of culturally and linguistically responsive practice?

TABLE 11: Related DEC EI/ECSE Standards and RPs

Initial Practice-Based Standards for Early Interventionists/Early Childhood Special Educators	Division for Early Childhood Recommended Practices
<p>7.2 Candidates engage in ongoing reflective practice and access evidence-based information to improve their own practices.</p> <p>Standard 8: EI/ECSE Field and Clinical Experience Early Interventionist/Early Childhood Special Education candidates progress through a series of planned and developmentally sequenced field experiences for the early childhood age ranges (birth to age 3, 3 through 5 years, 5 through 8 years), range of abilities, and in the variety of collaborative and inclusive early childhood settings that are appropriate to their license and roles.</p>	Applicable across all Recommended Practices

This assignment can be completed in multiple different approaches, depending on the course format. One approach is at the beginning of the semester (or each month), candidates choose [performance checklists](#) from the eight RP topic areas available via the Early Childhood Technical Assistance Center's (ECTA) webpage. After completing their selected checklist(s) and considering their own practice and upcoming field-based experience, candidates describe their strengths and next steps for each topic area and develop a goal for the semester (or month) in each strand they selected.

At the end of the semester (or month), candidates again complete the same checklist and revisit their progress towards that goal, reflect on what they have learned and include next steps and resources for continuous growth (Table 10). These reflections should be processed with mentor teachers and university supervisors to ensure the candidate has opportunities throughout the semester to work on and meet their goals.

The use of the ECTA checklists connects the RPs directly to a candidate's own practice and introduces them to tools that can be used throughout their

career, for both individual self-reflection and to center team based reflective conversations. Table 11 connects the importance of reflection and field experiences to the EI/ECSE Standards and recommends consideration across RPs.

INNOVATIVE APPROACHES TO LEARNING

The final section of this article focuses on innovative structures and approaches to consider for use with a variety of course content. As courses are increasingly offered in multiple formats (e.g., asynchronous online, remote, hybrid, "hyflex"), faculty must continue to be nimble and responsive in designing content that is relative and engaging for candidates.

Innovative Approaches: Problem-Based Learning Simulation (PBL-S) to Support Communication and Collaboration in Personnel Preparation

One goal of EI/ECSE is the delivery of comprehensive services to infants, toddlers, preschool-age children, and their families. This goal requires sharing and integrating the expertise of team members to meet children's and families' needs. However, an examination of preparation programs in higher education suggests that most curriculum content and practicum experiences are centered on a specific discipline. For example, SLP candidates are prepared with other SLP candidates, and their curriculum is almost entirely focused on content relevant to communication science and disorders. Similar disciplinary preparation occurs for candidates in the fields of psychology, education, social work, and health. Limited attention and time are given to interdisciplinary or cross-disciplinary collaborative practices in pre- and in-service training (Campbell et al., 2009; Gilbert et al., 2010; Hamilton-Jones & Vail, 2014). Consequently,

TABLE 12: Fictional example of case study

Laura is 4 years old and has recently been enrolled in an inclusive public preschool setting. She has an Individualized Education Program (IEP) with a qualification under developmental delay. The IEP indicates Laura has strengths in cognitive and motor skills but has difficulty communicating, struggles with transitions, following directions, and at times is aggressive towards adults and peers. Laura is currently receiving ECSE and SLP services. Additional paperwork indicates Laura has recently been removed from her mother's custody and lives with her grandmother. A caseworker has been assigned to the team.

In a PBL-S approach, candidates identify facts, generate hypotheses from these facts, specify next steps needed to confirm or deny these hypotheses, and then iterate on this process when new information is gathered. The table shows an example, based on the vignette above from the first week. This table might vary depending on which professional perspective a student is assuming (e.g., school social worker, teacher, special education coordinator, or SLP). The experience can also be done as a whole class from the perspective of a multi-disciplinary team.

The "Learning Opportunities" section includes topics that candidates need more information on to make hypotheses and identify relevant next steps. Learning Opportunities are broader subjects, not specific solely to the case being developed. These can be sources for future lectures or research assignments for candidates.

<p>1. Facts</p> <ul style="list-style-type: none"> • Laura is 4 years old and currently has an IEP. • Laura scored above the cut-off in physical and cognitive skills in a developmental screening. • Laura struggles with transitions, following directions, managing emotions. • Laura receives special education and speech-language services. • Laura is currently living with her grandmother. 	<p>2. Hypotheses</p> <ul style="list-style-type: none"> • Laura is meeting physical and cognitive developmental milestones. • Laura's mother needs to be invited to IEP meetings. • She is behind in social/emotional development. • Her behaviors could be trauma responses. • Laura's father is not involved and does not need to be invited to the IEP meeting.
<p>3. Next Steps</p> <ul style="list-style-type: none"> • Determine who is the legal guardian for IEP/educational decision making. • Refer Laura to the school social worker to screen and possibly assess for potential trauma related to her home life. • Assess and determine (as a team) whether Laura is receiving the right services and supports for her needs. 	<p>4. Learning Opportunities</p> <ul style="list-style-type: none"> • Who needs to be invited to an IEP meeting for children in custody outside their birth parents? • What do potential trauma responses look like in a 4-year-old? Where can I find information on typical development? • What school-based supports and interventions support young children? • How do I advocate when someone in a professional team disagrees with me?

in their first job, many beginning practitioners are poorly equipped to participate in collaborative practices with other team members (Bruder & Dunst, 2005). An interdisciplinary approach incorporating principles of adult learning by connecting content to real-life applications using problem-based learning-simulations (PBL-S) has potential to support cross-discipline collaboration. PBL-S is deemed a critical strategy for adult learners (Bryan et al, 2009.; Steinberg & Vinjamuri, 2014) and can be used to support learners from a variety of disciplines as they develop communication and collaboration skills necessary to adequately support children with disabilities and their families.

As a student-centered instructional approach, PBL-S mainly directs candidates' involvement in group study to solve ill-defined and open-ended scenarios using the following learning steps: analyzing problems, setting goals, collecting resources, summarizing ideas, and reflecting on problem-solving experiences (Lin et al., 2010). This process is designed to promote analytic reasoning, problem-solving, and collaborative learning and is aligned with Teaming and Collaboration RP 3 (TC 3): *Practitioners use communication and group facilitation strategies to enhance team functioning and interpersonal relationships with and among team members* (see Table 13).

PBL-S denotes learning within a safe educational environment, in which some part of reality is simulated. Candidates must learn and act within this environment. Simulation learning, thus, is a form of experiential learning that is person-centered, integrates many facets of learning (e.g., cognitive, motivational, affective, psychomotor, social) and has a high degree of authenticity (Breckwoldt et al., 2014). Simulation learning allows learners from various disciplines and of all performance levels to gain knowledge, to acquire skills, and/or to understand complex procedures in a controlled and safe environment. Simulation aims to provide close-to-authentic experiences to prepare learners for real

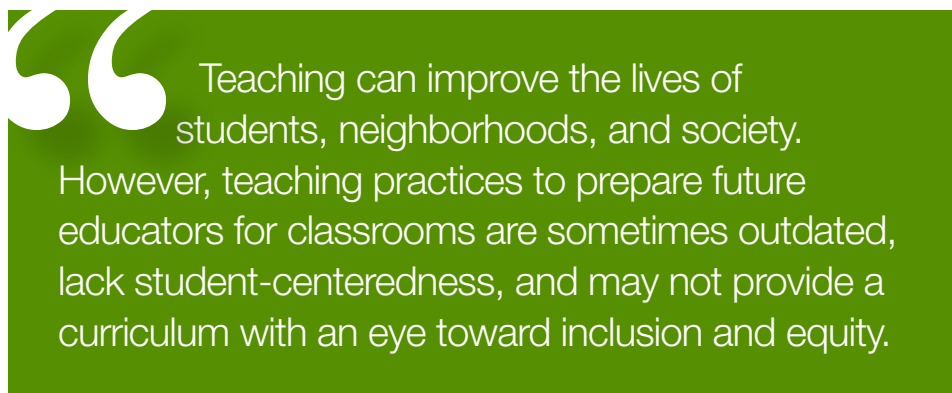
TABLE 13: Related DEC EI/ECSE Standards and RPs

Initial Practice-Based Standards for Early Interventionists/Early Childhood Special Educators	Division for Early Childhood Recommended Practices
<p>3.1 Candidates apply teaming models, skills, and processes, including appropriate uses of technology, when collaborating and communicating with families; professionals representing multiple disciplines, skills, expertise, and roles; and community partners and agencies.</p>	<p>Teaming & Collaboration (TC 3): Practitioners use communication and group facilitation strategies to enhance team functioning and interpersonal relationships with and among team members.</p>
<p>3.2 Candidates use a variety of collaborative strategies when working with other adults that are evidence-based, appropriate to the task, culturally and linguistically responsive, and take into consideration the environment and service delivery approach.</p>	<p><i>Note: Within each PBL-S, the content could focus on a variety of RPs.</i></p>
<p>3.3 Candidates partner with families and other professionals to develop individualized plans and support the various transitions that occur for the young child and their family throughout the birth through 8 age-span.</p>	
<p>7.3 Candidates exhibit leadership skills in advocating for improved outcomes for young children, families, and the profession, including the promotion of and use of evidence-based practices and decision-making.</p>	

future situations.

Participation in PBL-S involves learners working in small groups to address the learning and developmental needs of a fictional child. Each member of the group is assigned to a different stakeholder role in the child's life and can vary depending on the specific child/family scenario presented. University faculty individualize the scenarios as they see fit. The "problem" aspect of the scenario involves candidates reviewing weekly modules providing specific information on the child and family's life, as well as familiarizing themselves with the information contained within these modules according to their stakeholder role. As much as possible, the events occurring in the fictional child/family's life unfolded in 'real-time' during the semester, mimicking as closely as possible a real-life teaching situation.

University faculty begin each class session with a short lecture to address topics relevant to the weekly module that are also paired with a matching event in the child/family's life. Each class session would require learners to engage in PBL-S, facilitated by the faculty member; for example, candidates would need to evaluate information,



engage with other professionals, make pedagogical decisions and adapting their plans for the child as the child's circumstances changed. Additionally, the candidates would need to work together according to their assigned stakeholder perspectives to address the child and family's immediate and long-term learning and developmental needs. Table 12 provides a fictional example of the PBL-S process that could be used with pre-service teachers.

In conclusion, university faculty can utilize PBL-S as a means to support interdisciplinary collaboration and communication when working with families and young children, while simultaneously extending candidates' knowledge base and experiences relative to their future

careers. Specific connections to the DEC Standards and RPs are noted in Table 13.

Innovative approaches: Podcast as a Pedagogical Tool for Accessible EI/ECSE Preparation

Education is the key to making communities and the world better (Edelman, 1992). Teaching can improve the lives of students, neighborhoods, and society. However, teaching practices to prepare future educators for classrooms are sometimes outdated, lack student-centeredness, and may not provide a curriculum with an eye toward inclusion and equity. Candidates can engage with course content in a variety of ways, though opportunities to engage with technology in education

TABLE 14: Considerations for Using Podcasts in Coursework

1. Determine purpose for podcast for early childhood education courses.
2. Decide which early childhood podcasts to use in the course(s).
3. Collaborate with early childhood candidates and faculty to share podcast resources.
4. Implement practices and evaluate effectiveness of early childhood podcasts in curriculum.

TABLE 15: Related DEC EI/ECSE Standards and RPs

Initial Practice-Based Standards for Early Interventionists/Early Childhood Special Educators	Division for Early Childhood Recommended Practices
3.1 Candidates apply teaming models, skills, and processes, including appropriate uses of technology, when collaborating and communicating with families; professionals representing multiple disciplines, skills, expertise, and roles; and community partners and agencies.	Applicable across all Recommended Practices.
7.3 Candidates exhibit leadership skills in advocating for improved outcomes for young children, families, and the profession, including the promotion of and use of evidence-based practices and decision-making.	

may be one area that is exclusive and not accessible to all candidates (Macy et al., 2018; Shahriza et al., 2022). Podcasting is a form of technology that could be considered when designing accessible college courses (Lonn & Teasley, 2009). This section focuses on using podcasts in higher education as an accessible practice for personnel preparation. Four considerations will be discussed for adopting podcasts in university coursework summarized in Table 14.

To start planning for using podcasts, university faculty must start by determining the purpose of using podcasts in coursework. Some guiding questions might include: (a) Why use podcasts in my course? (b) What will students take away from the podcasts? and (c) What early childhood course(s) are best

for podcasts? For example, if a faculty member was teaching an assessment class, they would consider how using podcasts could support assessment concepts taught, and how candidates could better understand the profession with real-world examples discussed in the podcast. For example, in an episode of the BUTTERCUP podcast, guest Dr. Iheoma Iruka discussed a new contextual assessment tool she created with her colleagues that aims to assess the early learning setting with an equity lens (Goldberg et al., 2022; Macy & Bagnato, 2023). Assessing Classroom Sociocultural Equity Scale (ACSES) measures the sociocultural context of the early childhood environment (Curenton et al., 2018). By listening to the podcast interview with Dr. Iheoma Iruka

(Macy, 2022), EI/ECSE candidates learn directly from the scholar who developed ACSES and gain insights into how to create inclusive environments and personalized learning for all children.

Once the purpose and podcasts that fit course objectives have been determined, then faculty would decide which podcast and/or episode to use for each course. Familiarity with different relevant podcasts can be helpful for faculty making these decisions. Colleagues, friends, and candidates may be sources of referrals for learning about different podcasts that could be used in coursework. One way to decide which podcasts to use in courses might be to select keywords and use those in a search for content. Another way is to review early childhood websites and resources created by government funded agencies and centers. For example, [the Illinois Early Learning Project](#) has a website with a collection of several episodes to choose from that can be used in early childhood professional development and early childhood coursework.

Collaboration with early childhood candidates and other faculty to share resources and discuss use can be helpful with implementation. The more people who engage in the practice the more support that it can offer when getting started. Collaboration can support sustainability of practices as the foundation established at the beginning can create a way to have accountability in the process. For example, discussing practices with other university faculty can promote follow-up and idea generation.

Once university faculty determines the reason for including a podcast and selects the relevant podcast/episode, the next step is implementing podcasts as a tool for learning. There are many ways to use free podcasts in teaching. University faculty should consider assignments that make sense for the course (Hew, 2009). For example, in a Preschool

Methods course, candidates listening to an early childhood teaching practices podcast could select one practice described in the podcast and plan for implementation at their field-based site.

Of great importance is also eliciting feedback from the candidates, including their perceptions of using podcasts and any relevant feedback that can offer that will help inform future practice. Evaluating candidates' satisfaction with podcasts is an important step in the process (Macy, 2023).

The global pandemic resulting from COVID-19 health crisis presented an opportunity for university faculty to reconsider teaching and learning with an eye toward equity and inclusion. Podcasts and other alternatives to traditional teaching were explored as university faculty pivoted and found different ways to create learning opportunities for candidates (Dang et al., 2022). Podcasts as a pedagogical tool are a way to engage candidates with an alternative to traditional teaching that can enhance course content and expose candidates to "real-world" professional practices (Campbell, 2005). Podcasts can specifically be chosen to align across RPs and promotes EI/ECSE Standards as well (see Table 15). When university faculty use pedagogy tools such as podcasts, content may become more inclusive and accessible which offers a possible way to increase student engagement.

CONCLUSION

As the field currently faces a large and concerning educator shortage (Economic Policy Institute, 2022), faculty must consider how to support candidates in becoming well-prepared early childhood special educators who feel competent in their work. Leveraging the DEC Recommended Practices alongside the EI/ECSE Standards provides resources that candidates can

continue to reference long after they complete their preparation program. Designing a multitude of engaging and relevant experiences for candidates has great potential to create meaningful opportunities to make meaning of practices and standards in the field. Sharing and collaborating with other faculty members about approaches and learning experiences in preparation programs elevates outcomes for all candidates. It is through this type of collaborative effort and support that we begin to move forward towards a brighter future in preparing the next generation of early interventionists and early childhood special educators.

REFERENCES

- Bradshaw, C. P. Mitchell, M. M., & Leaf, P. L. (2010). Examining effects of schoolwide positive behavioral interventions and supports on student outcomes. *Journal of Positive Behavior Intervention*, 12(3), 113-148. <https://doi.org/10.1177/1098300709334798>
- Breckwoldt, J., Gruber, H., & Wittmann, A. (2014). Simulation learning. In: Billett, S., Harteis, C., Gruber, H. (Eds.) *International handbook of research in professional and practice-based learning* (pp. 673-698). Springer. https://doi.org/10.1007/978-94-017-8902-8_25
- Bornstein, J. (2017). Entanglements of discipline, behavioral intervention, race, and disability. *Journal of Cases in Educational Leadership*, 20, 131-144. <https://doi.org/10.1177/1555458917696810>
- Brown, C. L., Schell, R., Denton, R., & Knode, E. (2019). Family literacy coaching: Partnering with parents for reading success. *School Community Journal*, 29(1), 63-86. <https://files.eric.ed.gov/fulltext/EJ1219795.pdf>
- Brown, K. E. & Sheridan, S. M. (2023). Family engagement for early literacy: Interventions that promote family-school partnerships. In S. Q. Cabell, S. B. Neuman, & N. P. Terry (Eds.), *Handbook on the science of early literacy* (pp. 283-296). Guilford Press.
- Brownell, M. T., Benedict, A. E., Leko, M. M., Peyton, D., Pua, D., & Richards-Tutor, C. (2019). A continuum of pedagogies for preparing teachers to use high-leverage practices. *Remedial and Special Education*, 40, 338-355. <https://doi.org/10.1177/0741932518824990>
- Bruder, M. B., & Dunst, C. (2005). Personnel preparation in recommended early intervention practices: Degree of emphasis across disciplines. *Topics in Early Childhood Special Education*, 25, 25-33. <https://doi.org/10.1177/02711214050250010301>
- Bruns, D. A. & Pierce, C. D. (2007). Let's read together: Tools for early literacy development for all young children. *Young Exceptional Children*, 10(2), 2-10. <https://doi.org/10.1177/109625060701000201>
- Bryan, R., Kreuter, M., & Brownson, R. (2009). Integrating adult learning principles into training for public health practice. *Health Promotion Practice*, 10, 557-563. <https://doi.org/10.1177/1524839907308117>
- Butler, M. B., Lee, S., & Tippins, D. J. (2006). Case-based methodology as an instructional strategy for understanding diversity: Pre-service teachers' perceptions. *Multicultural Education*, 13(3), 20-26.
- Campbell, G. (2005). There's something in the air: Podcasting in education. *Educause Review*, 40(6), 32-47.
- Campbell, P., Chiarello, L., Wilcox, M., & Milbourne, S. (2009). Preparing therapists as effective practitioners in early intervention. *Infants & Young Children*, 22, 21-31. <https://doi.org/10.1097/01.IYC.0000343334.26904.92>
- Cochran-Smith, M., & Keefe, E. S. (2022). Strong equity: Repositioning teacher education for social change. *Teachers College*, 124(3), 9-41. <https://doi.org/10.1177/016146812211087304>
- Cloud, T. (2014). Cooperative learning in the classroom. *Journal on Best Teaching Practices*, 1(2), 7-8. <http://teachingonpurpose.org/wp-content/uploads/2015/03/Cloud-T.-2014.-Cooperative-Learning-in-the-Classroom.pdf>
- Cruz, R. A., & Rodl, J. E. (2018). An integrative synthesis of literature on disproportionality in special education. *The Journal of Special Education*, 52(1), 50-63. <https://doi.org/10.1177/0022466918758707>
- Curenton, S. M., Jensen, B., Iruka, I., Durden, T., Humphries, M., & Rochester, S. E. (2018). *Assessing Classroom Sociocultural Equity Scale (ACSES) – Version 2.5*. Boston, MA: Boston University.
- Dang, D. A., Moughnyeh, S., Stephens, E., Convers, V., Adkins-Jablonsky, S., & Raut, S. (2022). Pandemic pivot: Podcast as an active engagement tool in the classroom and beyond. *CourseSource*, 9, 1-4.
- Darling-Hammond, L. (2006). *Powerful teacher education: Lessons from exemplary programs*. Jossey-Bass.
- DeVeney, S. L., & McKeivitt, B. (2021). Interprofessional experience for future education professionals: School psychology and speech-language pathology students. *Teaching and Learning in Communication Sciences & Disorders*, 5(1), 1. <https://doi.org/10.30707/TLCS5.1.1624982519.476871>
- Division for Early Childhood (DEC) (2022). *DEC Recommended Practices (RPs): Updating the RPs*. <https://www.dec-sped.org/>

- [updating-the-practices](#)
Division for Early Childhood (DEC) (2020). *The EI/ECSE Professional Preparation Standards*. <https://www.dec-sped.org/ei-ecse-standards>
- Division for Early Childhood (DEC). (2017). *Position statement on challenging behavior and young children*. <https://www.decdocs.org/position-statement-challenging-beha>
- Division for Early Childhood of the Council for Exceptional Children (DEC). *DEC Recommended Practices*. (2014). <https://divisionearlychildhood.egnyte.com/dl/7urLP-WCt5U>
- Economic Policy Institute (2022). The pandemic has exacerbated a long-standing national shortage of teachers. <https://www.epi.org/publication/shortage-of-teachers/>
- Fish, R. E. (2019). Standing out and sorting in: Exploring the role of racial composition in racial disparities in special education. *American Educational Research Journal*, 56(6), 2573-2608. <https://doi.org/10.3102/0002831219847966>
- Gilbert, J., Yan, J., & Hoffman, S. (2010). A WHO report: Framework for action on interprofessional education and collaborative practice. *Journal of Allied Health*, 39, 196-197.
- Gilliam, W. S., Maupin, A. N., Reyes, C. R., Accavitti, M., & Shic, F. (2016, September). *Do early educators' implicit biases regarding sex and race relate to behavior expectations and recommendations of preschool expulsions and suspensions?* (Yale University Child Study Center Research Brief). https://www.jsu.edu/scholars/files/2017/03/Preschool-Implicit-Bias-Policy-Brief_final_9_26_276766_5379.pdf
- Goldberg, M. J., Lloyd, D. D., Syed, G., Welch, G. W., & Curenton, S. M. (2022). A validation study of the assessing classroom sociocultural equity scale (ACES) in pre-kindergarten to third grade classrooms. *Early Education and Development*. <https://doi.org/10.1080/10409289.2022.2146392>
- Grisham-Brown, J. (2000). Interdisciplinary activity assessment for young children with multiple disabilities: A program planning approach. *Young Exceptional Children*, 3(2), 3-10. <https://doi.org/10.1177/10962506000300201>
- Guralnick, M.J. (2000). Interdisciplinary team assessment for young children: Purposes and processes. In M. J. Guralnick (Ed.). *Interdisciplinary clinical assessment of young children with developmental disabilities* (pp. 3-15). Paul H. Brookes.
- Hamilton-Jones, B., & Vail, C. (2014). Preparing special educators for collaboration in the classroom: Pre-service teachers' beliefs and perspectives. *International Journal of Special Education*, 29, 76-86.
- Harden, R.M., & Stamper, N. (1999). What is a spiral curriculum? Centre for Medical Education, University of Dundee, Scotland.
- Hindman, A. H. & Morrison, F. J. (2011). Family involvement and educator outreach in Head Start: Nature, extent, and contributions to early literacy skills. *The Elementary School Journal*, 111(3). <https://doi.org/10.1086/657651>
- Johnson, D. W. (1994). *Cooperative learning in the classroom*. Association for Supervision and Curriculum Development.
- Johnson, D. W., & Johnson, R. T. (2008). Social interdependence theory and cooperative learning: The teacher's role. In *The teacher's role in implementing cooperative learning in the classroom* (pp. 9-37). Springer.
- Kaczmarek, L., Pennington, R., & Goldstein, H. (2000). Interdisciplinary consultation: A center-based team functioning model. *Education and Treatment of Children*, 156-172.
- Kelty, N. E. & Wakabayashi, T. (2020). Family engagement in schools: Parent, educator, and community perspectives. *SAGE Open*, 10(4). <https://doi.org/10.1177/2158244020973024>
- Kilgo, J., Aldridge, J., Vogtle, L., & Ronilo, W. (2014a). Transforming transdisciplinary early intervention/education through the use of case studies. *International Journal of Case Studies*, 3(6), 12-18. <https://doi.org/10.5281/zenodo.3522645>
- Kilgo, J., Aldridge, J., Vogtle, L., & Ronilo, W. (2014b). Using family case studies with graduate students through transdisciplinary graduate education. *International Journal of Case Studies*, 3(9), 22-26.
- King, G., Strachan, D., Tucker, M., Duwyn, B., Desserud, S., & Shillington, M. (2009). The application of an interdisciplinary model for early intervention services. *Infants & Young Children*, 22(3), 211-223. <https://doi.org/10.1097/IYC.0b013e3181abe1c3>
- Ladson-Billings, G. (2023). 'Yes, but how do we do it?' Practicing culturally relevant pedagogy. *ESED 5234 - Master List*. 37. <https://digitalcommons.georgiasouthern.edu/esed5234-master/37>
- Lengyel, L., & Vernon-Dotson, L. (2010). Preparing special education teacher candidates: Extending case method to practice. *Teacher Education and Special Education*, 33(3), 248-256. <https://doi.org/10.1177/0888406409357371>
- Lin, C-F., Lu, M-S., Chung, C-C., & Yang, C.M. (2010). A comparison of problem-based learning and conventional teaching in nursing ethics education. *Nursing Ethics*, 17(3), 373-382. <https://doi.org/10.1177/0969733009355380>
- Lonn, S. & Teasley, S.D. (2009). Podcasting in higher education: What are the implications for teaching and learning? *Internet and Higher Education*, 12, 88-92. <https://doi.org/10.1016/j.iheduc.2009.06.002>
- Loughran, J.J. (2002). Effective reflective practice: In search of meaning in learning about teaching. *Journal of Teacher Education*, 53(1) 33-43. <https://doi.org/10.1177/0022487102053001004>
- Louie, N., Adiredja, A. P., & Jessup, N. (2021). Teacher noticing from a sociopolitical perspective: The FAIR framework for anti-deficit noticing. *ZDM Mathematics Education*, 53, 95-107. <https://doi.org/10.1007/s11858-021-01229-2>
- Macy, M. (October, 2023). *Airtime for professionals via podcasting*. National Center for Families Learning (NCFL) conference in Omaha, NE. <https://conference.familieslearning.org/sessions/airtime-for-professionals-via-podcasting/>
- Macy, M. (Host). (2022, October 18). Personalized learning with Dr. Iheoma Iruka [Audio podcast]. BUTTERCUP. <http://www.marisamacy.com/video podcastsfeed/2022/10/16/dr-iheoma-u-iruka>
- Macy, M. & Bagnato, S. (2023). Wishful LINKing: Authentic environmental measures aligned with programmatic purposes. *Early Childhood Education Journal*. <https://doi.org/10.1007/s10643-022-01424-0>
- Macy, M., Macy, R., & Shaw, M., (2018). Bringing the ivory tower into students' homes: Promoting accessibility in online courses. *Ubiquitous Learning: An International Journal*, 11(1), 13-21. <https://doi.org/10.18848/1835-9795/CGP/v11i01/13-21>
- Moldavan, A. M., & Gonzalez, M. L. (2023). Engaging preservice teachers with equity-related cases to make visible the inequities in mathematics teaching. *Action in Teacher Education*, 45(4), 282-301. <https://doi.org/10.1080/01626620.2023.2242312>
- Nash, J. M. (2008). Interdisciplinary training: Key components and prerequisites for success. *American Journal of Preventive Medicine*, 35(2), S133-S140.
- Nasir, N. S., Scott, J., Trujillo, T., & Hernández, L. (2016). The sociopolitical context of teaching. In D. Gitomer & C. Bell (Eds.), *Handbook of research on teaching* (5th ed., pp. 349-390). American Educational Research Association.
- National Center on Early Childhood Quality Assurance (NCECQA; 2022). *Inclusion of Young Children with Disabilities*. https://childcareta.acf.hhs.gov/sites/default/files/new-occ/resource/files/22_09_09_inclusion_of_young_children_with_disabilities_brief_final_508_compliant_1.pdf
- Rausch, A., Bold, E., & Strain, P. (2021). The more the merrier: Using collaborative interdisciplinary services to maximize inclusion and child outcomes. *Young Exceptional Children*, 24(2), 59-69. <https://doi.org/10.1177/1096250620922206>
- Shahriza, A. Z., Rahmatullah, B., Majid, MHA., Samuri, S. M., Hidayanto, A. N., Yas, Q. M., & Purnama, S. (2022). A systematic literature review on the use of podcasts in education among university students. *AJTLHE*, 14(1), 222- 236. <http://dx.doi.org/10.17576/ajtlhe.1401.2022.10>

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- Slavin, R. E. (2012). Classroom applications of cooperative learning. In K. R. Harris, S. Graham, T. Urdan, A. G. Bus, S. Major, & H. L. Swanson (Eds.), *APA educational psychology handbook, Vol. 3. Application to learning and teaching* (pp. 359–378). American Psychological Association. <https://doi.org/10.1037/13275-01>
- Staats, C. (2012). Implicit racial bias and school discipline disparities. *The Kerwin Institute*. <https://kirwaninstitute.osu.edu/sites/default/files/documents/ki-ib-argument-piece03.pdf>
- Steinberg, M.S., & Vinjamuri, M.K. (2014). Activating adult-learning principles through small groups in preparing social work students to achieve CSWE research competencies. *Journal of Teaching in Social Work, 34*(4), 363- 383. <https://doi.org/10.1080/08841233.2014.937890>
- Theoharis, G., Causton, J., & Tracy-Bronson, C. P. (2016). Inclusive reform as a response to high-stakes pressure? Leading toward inclusion in the age of accountability. *Teacher College Record, 118*, 1-30.
- Torres, T., & Barber, C. R. (2017). *Case studies in special education: A social justice perspective*. Charles C Thomas Publisher, Ltd.
- U.S. Department of Education. (2020). *OSEP fast facts: Black or African American children with Disabilities*. <https://sites.ed.gov/idea/osep-fast-facts-black-or-african-american-children-with-disabilities-20/>
- U.S. Department of Education, Office of Civil Rights (2016). *2013-2014 Civil Rights Data Collection: A first look*. <https://www2.ed.gov/about/offices/list/ocr/docs/2013-14-first-look.pdf>
- U.S. Department of Health and Human Services & U.S. Department of Education. (2023). *Policy statement on inclusion of children with disabilities in early childhood programs*. <https://sites.ed.gov/idea/files/policy-statement-on-inclusion-11-28-2023.pdf>
- Ward, W., Zagoloff, A., Rieck, C. & Robiner, W. (2018). Interprofessional education: Opportunities and challenges for psychology. *J Clin Psychol Med Settings 25*, 250–266.
- Woods Jr., I. L. (2023). Teachers' racial bias: Can teachers rate an African American boy similarly to his racial counterparts on problem behaviors for a broad rating scale? *School Psychology Review, 52*(3), 264-278. <https://doi.org/10.1080/2372966X.2022.2041212>