

## **Standard 1: Child Development & Early Learning**

**STANDARD 1:** Candidates understand the impact of different theories and philosophies of early learning and development on assessment, curriculum, instruction, and intervention decisions. Candidates apply knowledge of normative developmental sequences and variations, individual differences within and across the range of abilities, including developmental delays and disabilities, and other direct and indirect contextual features that support or constrain children's development and learning. These contextual factors as well as social, cultural, and linguistic diversity are considered when facilitating meaningful learning experiences and individualizing intervention and instruction across contexts.

**Component 1.1.** Candidates demonstrate an understanding of the impact that different theories and philosophies of early learning and development have on assessment, curriculum, intervention, and instruction decisions.

### **1.1 Knowledge Base**

Knowledge of early development and learning are represented in many sets of professional standards as a foundation for educational practice. InTASC Standard 1 (CCSSO, 2013) emphasizes that appropriate and challenging learning experiences should be based on an understanding of how learners grow and develop across multiple domains. Standard 1 in the CEC Preparation Standards (2015) emphasizes the importance of applying knowledge about how individual variations in abilities may interact with development and learning. Professional standards outlined by NAEYC (2011), in particular Standard 1, emphasize that knowledge of young children's characteristics and needs from birth through 8, as well as multiple influences on early development and learning, underlie the ability to design and provide healthy, challenging learning environments. The foundational role of knowledge of development and learning is also evident in Standard 1 of the CAEP Elementary Education Standards (2018), which states that the ability to plan and implement equitable, high quality learning experiences and to work collaboratively with families is based on an understanding of children's growth and development.

The CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (CEC, 2017) identifies theories of normative developmental sequences and variations of these sequences as a key component of candidate knowledge. DEC Recommended Practices (2014) Strands of Assessment and Instruction, in particular A3 and INS4, recommend that educators use their understanding of development to make appropriate accommodations and plan for appropriate supports for child participation and learning. Similarly, the CEC High-Leverage Practices (HLP) (McLeskey et al., 2017), in the area of assessment (i.e., HLP5) and instruction (i.e., HLP13), state that educators use their knowledge of children's developmental strengths and needs to plan for and make accommodations for ensuring children's access and participation in the general curriculum. The common theme throughout these standards is that knowledge of development and learning directly informs candidate's practices. Theories and philosophies of early development and learning reflect on how such knowledge is organized as well as on the research that leads to, tests, and expands the theories. Theories represent how societies, cultures, families, and individuals view

childhood and the avenues through which they become well-functioning adults (Harkness et al., 2013). Theories guide the research predictions, hypotheses, and hypothesis testing that underlie what is known about children's development and how optimal development is achieved through children's changing interactions with their everyday cultural and linguistic environments in their homes, communities, and schools from birth onward (Odom, 2016; Shonkoff & Richter, 2013). Developmental theory has yielded knowledge of how children develop and learn in different domains and under different conditions, including how different areas of development such as cognition and emotion are related to one another (e.g., Dunst, 2007). When young children have or are at risk for developmental delays and disabilities, theory and associated research also describe how development and learning are similar to or different from other children and how specific delays or developmental differences in one area may influence other areas of development and learning (Lewis et al., 2014; Wolff, 2016). EI/ECSE professionals take these influences into account as they plan and interpret individualized assessment, as they consider needed adaptations to learning environments, and as they design and deliver intervention and instruction.

Theories also address whether and how development and learning can be influenced through intervention and instruction. Applied researchers draw upon developmental and learning theories as they formulate and test specific interventions and instructional approaches, often with children or families with specific characteristics (Dunst, 2017). For example, a theory-based related to the role of caregiver responsiveness with young children with Autism Spectrum Disorder (ASD) has yielded effective, research-based tools that the EI/ECSE professional is able to use as they plan and deliver intervention with young children with ASD and their families, with positive outcomes for both children and families (e.g., Siller et al., 2013).

Different theories of development and learning (e.g., developmental, behavioral, systems) underlie many historical and current models in early childhood education as well as more narrowly defined instructional interventions related to particular child outcomes (McLean et al., 2016) and areas of content knowledge. Program and practice guidelines either explicitly or implicitly represent the perspectives of different theories. Theories of development and learning, and of the programs and guidelines derived from them, have changed from a focus on child alone to a focus on child within developmental context (Sameroff, 2009; Shonkoff & Richter, 2013). All of these perspectives are evident in current programs and guidelines, and thus the EI/ECSE candidate uses these perspectives to inform their practice and contexts.

A systems perspective has had a significant effect on current practices in EI/ECSE (Guralnick, 2017). For example, providing services in children's natural environments and ensuring access to the general education curriculum both reflect a view that it is important to understand and support development within the child's context. Further, from a systems perspective, families of children with disabilities are viewed as central to the provision of EI/ECSE, both as recipients of services and as a significant part of the child's developmental and learning environment. Family systems theory has yielded practice guidelines that result in positive outcomes for both families and children (Dempsey & Dean, 2017) and is represented in recommended practices in EI/ECSE (DEC, 2014).

Theories of learning and development provide the foundation for how EI/ECSE professionals view children, families, and themselves, as well as what they do with children and their families. The

EI/ECSE candidate draws from their knowledge of specific theories and from their own personal theories and philosophies about development and learning as they make decisions about assessment, intervention, and instruction, and as they collaborate with families and with other professionals (Odom, 2016). EI/ECSE candidates also apply their knowledge of a variety of developmental and learning theories to understand the history and current political context of their field, to evaluate the relevance of differing perspectives, and to reflect on their own practices.

**Component 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.

### **1.2 Knowledge Base**

A variety of standards and recommended practices emphasize the importance of understanding child development for planning instruction and intervention. InTASC Standards 1 and 2 (CCSSO, 2013) require that educators apply their knowledge of how learners generally grow and develop, children's individual differences, and the role of the child's family's social, linguistic, and cultural characteristics to plan developmentally and individually appropriate educational experiences. Similarly, NAEYC Standard 1 (2011) and CAEP Elementary Standard 1 (2018) both dictate that candidates should know and understand young children's development and use developmental knowledge to create supportive and challenging learning environments. Moreover, Standard 1 of the CAEP Elementary Standards (2018) specifically names race, religion, ethnicity, language, culture, and family configuration as potential characteristics that may influence the ways children learn best. Such information is important as educators plan and implement assessment, instruction, and intervention. IDEA specifically acknowledges that culturally and linguistically appropriate assessments should be used when determining children's special education eligibility and support needs to minimize the possibility of discrimination (IDEA, 2004). Knowledge about normative sequences of child development and learning, children's individual characteristics, and the influence of cultural and linguistic characteristics allow educators to make better decisions about what educational experiences are most likely to promote children's development and learning (Copple & Bredekamp, 2009).

Knowledge about typical child development and learning is particularly important when working with children with or at risk for developmental delays and disabilities, whose developmental characteristics may require individualized assessment, planning, instruction, and intervention as noted in CEC/DEC Specialty Set for Early Childhood Special Education/Early Intervention sections 1 and 3 (CEC, 2017). The DEC Recommended Practices (2014) advise that intervention should build on, rather than replace, developmentally appropriate practices grounded in the principles of child development and learning. DEC Recommended Practices (2014) in the areas of Assessment (A3) and Families (F1) recommend that educators use information about children's and families' language and culture to be more responsive and effective in those areas. The CEC High-Leverage Practices (McLeskey et al., 2017) areas of collaboration and assessment, specifically HLP3 and HLP4, state that educators must work together with families using multiple sources and strategies of information to ensure that intervention planning is sensitive to the child's

and family's language, culture, and experiences.

Knowledge of typical developmental sequences allows educators to make preliminary decisions about the physical environments, activities, and interactions that will best facilitate children's development (Copple & Bredekamp, 2009). Such knowledge includes understanding the ways in which different developmental domains emerge and work together as children accomplish daily activities such as play and academic learning. For example, multiple developmental domains interact to support learning and organizational processes such as motivation, executive functioning, and emotional and behavioral regulation (e.g., Liew, 2011; Ursache et al., 2012). In turn, such learning and organizational processes are positively correlated with children's later academic achievement (e.g., Guralnick, 2017; Li-Grining et al., 2010). Moreover, each developmental domain can influence the development of other domains. For example, there is evidence that early motor delays may contribute to the social and communicative behavior of young children with ASD (Bhat et al., 2011; McDonald et al., 2013). Knowledge of typical developmental sequences as well as the relationships between developmental domains allows the EI/ECSE candidate to plan and implement more effective and proactive assessment, intervention, and instruction. All children, including those with developmental delays and disabilities, benefit from high quality early education in which the EI/ECSE professional employs developmentally appropriate practices grounded in the principles of child development (e.g., Phillips & Meloy, 2012; Weiland, 2016).

It is important to supplement knowledge of developmental sequences with an understanding that typical development varies within general normative ranges. Individual children may differ in their progression through developmental sequences (Copple & Bredekamp, 2009). A child's individual patterns of development within and across developmental domains may influence how the child learns best as well as their patterns of school readiness and academic achievement (e.g., Halle et al., 2012). These individual differences reflect the influence of biology, environmental circumstances, and early educational experiences on young children's development (Copple & Bredekamp, 2009), and are not always indicative of a developmental delay or disability. Acknowledging that children may vary in their developmental sequences within normative ranges can help EI/ECSE educators better identify when a child has a developmental delay or disability that requires special education, and when the child may simply need instruction or supports that differ from those that are already being offered. Instruction is more effective when EI/ECSE educators individualize instruction based on a child's particular skills in relevant developmental domain(s) (Connor et al., 2009).

Recognizing the influence of cultural and linguistic characteristics on children's development is similarly essential when making decisions about individual supports and the presence of a developmental delay or disability, particularly when a child comes from a marginalized background (e.g., children of color, dual language learners). Understanding the influences of culture and language on child development points to the ways cultural experiences, activities, and expectations influence and interact with the timing of children's developmental milestones, and the activities and expectations that families value and support (Rogoff, 2003; Spicer, 2010). The EI/ECSE professional uses this information to more accurately assess a child's development and behavior (Banerjee & Guiberson, 2012), better collaborate with families (Rossetti et al., 2017), and plan effective, culturally responsive instruction and intervention (Aronson & Laughter, 2016; Bradshaw, 2013).

Furthermore, the effects of poverty, inequities, and adverse experiences (e.g., lack of access to high quality early educational experiences, toxic stress) must be detangled by the EI/ECSE candidate from cultural, linguistic, and contextual differences (e.g., cultural expectations, immigration, bilingualism) that influence children's development in various ways (e.g., Barac et al., 2014; Hammer et al., 2014; Keels & Raver, 2009). EI/ECSE educators use a strengths-based approach to instruction and intervention that takes into account cultural and linguistic characteristics to support every child's development (Rogoff et al., 2017).

**Component 1.3:** Candidates apply knowledge of biological and environmental factors that may support or constrain children's early development and learning as they plan and implement early intervention and instruction.

### **1.3 Knowledge Base**

The CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention section 1 (CEC, 2017) states that candidates understand the biological and environmental factors that impact pre-, peri-, and post-natal development and learning. Similarly, NAEYC Standard 1 (2011) recommends that early childhood education candidates understand the multiple influences on young children's development and learning. Standard 1 of the CAEP Elementary Standards (2018) recommends that educators recognize and assess the unique learning profile and characteristics of students in order to understand how those differences (e.g., prior knowledge and experiences, physical and social well-being, socioeconomic status) may impact learning, motivation, and attention. Knowledge of biological and environmental influences on development is important as educators use information about children's individual characteristics, environments, and prior experiences to shape their instruction, and as they develop and facilitate responsive environments that support children's development and learning, as outlined in InTASC Standard 1 (CCSSO, 2013). Thus, understanding how biological and environmental factors support or constrain children's development and learning is essential for effective instruction and intervention. DEC Recommended Practices (2014) INT1 and INT3 in the area of instruction recommend that educators, together with families, gather and use information about children's strengths and preferences across developmental domains to inform decisions about individualization. CEC's High-Leverage Practices (McLeskey et al., 2017) addressing social/emotional (HLP7 and HLP10) focus the educator's attention on the impact of the child's multiple environments and note that they use this knowledge to design learning environments that support the child's growth and development.

A variety of biological factors can impact children's early development in ways that may affect both their need for intervention as well as the array of services and instructional practices they would benefit from. EI/ECSE educators who are aware of these potential effects are able to be more responsive to their emergence and the implications for assessment, intervention, and instruction. For example, prematurity or low birth weight may be associated with medical conditions that place children at risk for developmental delays or exceptionalities (DEC, 2018). Moreover, several developmental disabilities, including ASD, have been found to have a genetic heritability component (Deng et al., 2015; Lee et al., 2016). Understanding the potential biological contributors to specific aspects of children's development can help EI/ECSE candidates better support children, particularly

those at risk for or with disabilities based on biological predispositions.

Children's early environments can similarly play a significant role in their development, and therefore should be considered as EI/ECSE candidates plan and implement assessment, intervention, and instruction. High quality classroom environments that are characterized by developmentally appropriate furnishings and activities, teacher responsiveness, proactive behavior management, language supports, and opportunities for concept development have been shown to benefit children's academic engagement and support early learning and development (e.g., Aydoğan et al., 2015; Brunsek et al., 2017; Hatfield et al., 2016). Recognizing the important features of high quality classroom environments can help the EI/ECSE candidate plan developmentally supportive classroom environments and activities. Environmental features outside of the classroom also impact children's early learning and development. For example, it is well established that parents reading to and talking with their children has a positive impact on children's language development and early literacy (Reese et al., 2010). Understanding family routines, strengths, and priorities as well as community resources can help EI/ECSE candidates effectively partner with families to ensure children have resources and experiences that support their development (Friedman et al., 2012; Guralnik, 2011; Keilty, 2019).

Research has also noted that environments with reduced developmental supports can have a constraining influence on development. For example, research has found that children from lower socioeconomic status (SES) neighborhoods have access to lower quality early education and care classrooms (e.g., Bassok & Galdo, 2015), which can negatively affect their early development (e.g., Hillemeier et al., 2013; McCoy et al., 2015). Children from low SES communities may also have reduced access to community resources that support learning, including libraries and affordable cultural activities such as museums (e.g., Gehner, 2010; Sin, 2011), and nutritious food (Walker et al., 2010). The emotional and social characteristics of families and communities may also affect children's development and learning. Early trauma associated with maltreatment and violence in the home may affect children's emotional regulation and social adjustment (Maughan & Cicchetti, 2002) as well as increase the likelihood of internalizing and externalizing challenging behaviors (Milot et al., 2010). Instruction and intervention is most effective when it is responsive to both the strengths and challenges of a child's developmental context, particularly for children experiencing significant structural inequities (e.g., Walker et al., 2011).

It is important to recognize that biological and environmental factors can interact to influence children's development. A rich literature base examining epigenetics and the impact of the environment on brain development has illustrated how environmental features can trigger or mute genetic factors to influence children's development in ways that impact their learning. For example, both brain structure (e.g., D'Angiulli et al., 2008; Raizada et al., 2008) and neural response differences (e.g., D'Angiulli et al., 2008; Kishiyama et al., 2009) exist between children from low SES families and their higher SES peers. Such research illustrates how persistent environmental features can potentially alter the biological make-up of children in ways that affect their learning and development. Acknowledging this interaction between environment and biology can help educators better understand the pathways through which such factors affect children's development and learning, providing a foundation for their work with individual children and their families.

**Component 1.4:** Candidates demonstrate an understanding of characteristics, etiologies, and individual differences within and across the range of abilities, including developmental delays and disabilities, their potential impact on children’s early development and learning, and implications for assessment, curriculum, instruction, and intervention.

#### **1.4 Knowledge Base:**

CEC Standard 1 (2015) states that educators should apply knowledge of the impacts the range of characteristics, etiologies, and abilities, including developmental delays and disabilities, may have on how children develop and learn in order to provide meaningful, challenging learning experiences for each and every child. Section 1 of the Initial Specialty Set for Early Childhood Special Education/Early Intervention (CEC, 2017) explicitly calls for knowledge of etiologies, characteristics, and classification of common disabilities in infants and young children, including the implications of those disabilities for development and learning early in life. DEC Recommended Practices (2014) in the areas of Assessment (A3) and Instruction (INS1) recommend that educators, together with the child’s family, gather and use information about children’s strengths, preferences, and interests to support the child’s active engagement and learning. The CEC High-Leverage Practices (McLeskey et al., 2017) areas of collaboration and assessment, specifically HLP3 and HLP4, state that educators work together with families using multiple sources and strategies of information to ensure that intervention planning is sensitive to the child’s strengths and needs.

Knowledge of specific exceptionalities informs determination of eligibility for special education services, and also provides guidance to identify specific types of services that may address strengths and needs associated with exceptionality-related characteristics and etiologies. For many young children, no clear indicators of either biological or environmental exceptionality may be apparent; instead, delay of unknown origin is used to establish eligibility for services. In the U.S., for example, the presence of developmental delay(s) in one or more areas of development is used to indicate that an exceptionality may exist or may emerge, and to establish eligibility for early intervention/early childhood special education (IDEA, 2004).

Knowledge of specific exceptionalities and potential etiologies inform, but do not dictate, the identification and implementation of individualized services and instruction. The EI/ECSE candidate uses their knowledge of characteristics associated with different exceptionalities and developmental delay(s) as they plan, implement, and interpret assessments, plan and provide intervention and instruction, and identify needed child and family services (Hodapp et al., 2016). For young children whose exceptionalities are identified at birth or early in life (e.g., cerebral palsy, PKU, hearing impairment), knowledge of exceptionality characteristics and etiology also informs educators’ understanding of patterns of typical and atypical development and learning that may emerge. For example, educators’ knowledge of exceptionality characteristics and etiology can provide one basis for anticipating developmental and learning constraints and strengths typically associated with conditions such as visual impairment or Down syndrome (Fidler et al., 2016; Hahn, 2016). Based on this knowledge, EI/ECSE professionals, in collaboration with families and other professionals, identify goals and outcomes that respond directly to core characteristics of the child’s exceptionality (Hodapp et al., 2016) as well as to other developmental and learning strengths and needs. For example, educators may draw upon knowledge of specific curriculum goals appropriate to children

with Autism Spectrum Disorder or visual impairment by focusing respectively on goals in the area of social interaction or mobility (Kasari et al., 2012; Lawton et al., 2014; Lewis et al., 2014; Will et al., 2014). Further, anticipating these needs can lead to an early focus on supporting development in areas that may be affected by differences in mobility or social interaction in young children with these exceptionalities. Knowledge of specific exceptionalities also enables educators to recognize patterns of development that are atypical for children with specific exceptionalities, leading to earlier identification of individual strengths as well as individual instruction and intervention needs. For children with developmental delay(s), knowledge of specific exceptionalities and the patterns of development associated with them may assist in identifying emerging exceptionalities in areas such as academic learning or mental health. Thus, for all children, educators seek not only to remediate the primary area of delay or exceptionality, but to prevent the development of secondary delays or disabilities (Guralnick, 2017; Parker & Ivy, 2014; Will et al., 2014).

EI/ECSE candidates use their knowledge of exceptionalities and associated known or possible etiologies, along with their knowledge of typical and atypical development, to gain a comprehensive understanding of each child's unique configuration of abilities and needs. Even where exceptionalities and etiologies are known, individual children demonstrate a wide range of individual differences in the number and severity of exceptionality-related characteristics as well as their strengths and needs in other areas of development and learning (Hodapp et al., 2016). Thus EI/ECSE candidates must draw on their knowledge of exceptionalities and developmental delays, and of potential effects on development and learning, as they plan and apply adaptations to children's everyday environments and provide individualized supports that allow them to participate in a range of natural environments and benefit from the general education curriculum (Dunst et al., 2017; Sandall et al., 2016). The EI/ECSE candidate assists each child to build a larger repertoire of skills and knowledge in areas of development and learning as varied as play, language, peer interaction, and emergent literacy and math.

Interpretation of disability and developmental risk, as well as approaches to intervention and instruction, are grounded in sociocultural contexts (Harkness et al., 2013). EI/ECSE candidates use their knowledge of characteristics and etiologies of exceptionalities and developmental delays, in addition to understanding families' beliefs about their children, exceptionality, and EI/ECSE, to support all families in their central roles as supporters of their children's development (DEC, 2014; Dunst et al., 2017).

## **Standard 2: Partnering with Families**

**STANDARD 2:** Candidates use their knowledge of family-centered practices and family systems theory to develop and maintain reciprocal partnerships with families. They apply family capacity-building practices as they support families to make informed decisions and advocate for their young children. They engage families in opportunities that build on their existing strengths, reflect current goals, and foster family competence and confidence to support their children's development and learning.



**Component 2.1.** Candidates apply their knowledge of family-centered practices, family systems theory, and the changing needs and priorities in families' lives to develop trusting, respectful, affirming, and culturally responsive partnerships with all families that allow for the mutual exchange of knowledge and information.

### **2.1 Knowledge Base**

Family-centered principles are embedded among the standards of what candidates should know and be able to do in early childhood special education/early intervention. InTASC Standard 10(q) emphasizes the importance of respecting families while seeking to work collaboratively with them (CCSSO, 2013). Likewise, elements of NAEYC Standard 2 affirms the importance of developing partnerships with children's families which includes knowing family characteristics and engaging families through respectful, reciprocal relationships (NAEYC, 2011). CEC Standard 7 focuses on collaborating in a culturally responsive manner with families for the purpose of planning programs and accessing services (2012), while InTASC Standard 9(m) highlights the criticality of self-reflecting on one's own frame of reference and biases and the potential effects they have on relationships (CCSSO, 2013). Lastly, CAEP Elementary Standard 1 echoes the concepts from multiple standards, that teachers work respectfully and reciprocally with families (2018).

"Almost 30 years of research and experience has demonstrated that the education of children with disabilities can be made more effective by...strengthening the role and responsibility of parents and ensuring that families of such children have meaningful opportunities to participate in the education of their children at school and at home" (IDEA, 2004). The Individuals with Disabilities Education Act (2004) protects the rights of children with disabilities and their parents; mandates that information be provided to parents; and ensures parent participation in meetings and placement decisions. Section 303.344 of IDEA outlines the requirement of family information being included in the Individualized Family Service Plan (IFSP), including an explicit statement of the family's resources, priorities, and concerns. Recognizing the essential role of caregivers in the learning and development of their young children who have or are at risk for developmental delays or disabilities, the DEC Recommended Practices strive to offer guidance to parents and professionals who work with young children, birth through age 8 (2014). Among the seven topic areas, the family practices encompass three themes: 1) family-centered practices; 2) family capacity-building practices; and 3) family and professional collaboration. Recommended Practice F3 underscores practitioners being responsive to the family's concerns, priorities, and changing life circumstances whereas Recommended Practice F1 stresses the importance of building partnerships with families that are trusting and respectful while also sensitive to cultural, linguistic, and socio-economic diversity (2014). Furthermore, the DEC position statement on the role of special instruction in early intervention (DEC, 2014) emphasizes that IDEA (2004) Part C's early intervention services "focus on active caregiver-professional partnerships that are grounded in family-centered practices and guided by family priorities (p. 1)."

Acknowledging that working with families is essential and ultimately provides many benefits for the children, CEC's High-Leverage Practices identify practices that support mutual sharing of knowledge and information encouraging educators to "organize and facilitate effective meetings with professionals and families (p. 18)" and to "collaborate with families to support student learning and

secure needed services (p. 18).” These practices build “effective relationships and create a better understanding of students’ needs” (McLeskey et al., 2017).

The Workgroup on Principles and Practices in Natural Environments (2008) key principles of early intervention includes an emphasis on families as equal partners in early intervention and that the family-professional relationship reflects mutual trust, respect, honesty, and open communication. Essential to the family-professional partnership is respect. The trust that is placed in professionals must be reciprocated with respect which can be provided in a variety of ways, including recognizing and abiding by the customs of families being supported and “accepting family decisions that differ from recommendations” (Hanson & Lynch, 2010, p. 167). Hedeem et al. (2013) recognize the important role and expertise of all members of teams, including parents, to develop effective plans (Individualized Family Service Plans [IFSPs] and Individualized Education Programs [IEPs]).

Dunst (2002) characterizes *Family-centeredness* as “beliefs and practices that treat families with dignity and respect; individualized, flexible, and responsive practices; information sharing so that families can make informed decisions; family choice regarding any number of aspects of program practices and intervention options; parent-professional collaboration and partnerships as a context for family-program relations; and the provision and mobilization of resources and supports necessary for families to care for and rear their children in ways that produce optimal child, parent, and family outcomes (p. 142)”. In order to close the gap between what professionals know about family-centered services and what they actually practice, Parette and Brotherson (2004) recommend that personnel preparation programs focus on encouraging students to adopt family-centered attitudes and support them in constructing and participating in learning communities. Similarly, Mandell and Murray (2005) suggest that considerations for personnel preparation programs to assist in moving the field forward in its value and use of family-centered practices may include many and varied experiences with and about families, opportunities to problem-solve around obstacles experienced in the field, and instructional activities that highlight the significance of the family-professional partnership, including relationships with families whose background may be different from their own. Developing practices to be family-centered, accepting, affirming, and responsive to families of different cultures and beliefs is important. Cultivating family engagement skills in pre-service and in-service professionals leads to strengthening the family-professional partnership and improving outcomes for families who have young children with disabilities (Cosgrove et al., 2019).

**Component 2.2.** Candidates communicate clear, comprehensive, and objective information about resources and supports that help families to make informed decisions and advocate for access, participation, and equity in natural and inclusive environments.

## **2.2 Knowledge Base**

Family-professional partnerships are defined as interdependent relationships between practitioners and families that are built on trust, honesty, and shared responsibility (Brotherson et al., 2010). Among the essential knowledge represented in InTASC Standard 10 are the collaborative interaction skills with colleagues and families; engagement in advocacy in collaborative contexts; and continued

professional learning (i.e., use of collaboration, mentorship, feedback, reflection) (CCSSO, 2013). Likewise, CEC Standard/Component 7.2 highlights the collaboration, communication, and coordination with families essential to support assessment, planning, and implementation of effective programs and services to foster progress toward child and family outcomes (2015).

Family-professional partnerships are key to realizing the intent of the law and are critical to high quality early childhood special education/early intervention. The Individuals with Disabilities Education Act (IDEA) of 2004 mandates that information be provided to parents; ensures parent participation in meetings and placement decisions; and protects the rights of children with disabilities and their parents (IDEA, 2004).

The DEC Code of Ethics Responsive Family-Centered Practices stress that practitioners prepare families so that they can make informed decisions regarding services for their children (DEC, 2009). DEC Recommended Practice F2 highlights the importance of practitioners providing families with up-to-date and unbiased information that they can comprehend and use to make informed choices and decisions (2014). High-Leverage Practice 3 (McLeskey et al., 2017) underscores the importance of collaborating with families to ensure families are informed about their rights and special education processes as well as emphasizes the necessity of respectful, effective, communicative relationships. Addressed intermittently throughout the CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (2017), Skill ECSE.S6.6 plainly contends that practitioners “advocate on behalf of infants and young children and their families.” In order to nurture the capacity of families, practitioners informing families about opportunities for leading and building skills for self-advocacy is represented in DEC Recommended Practice F10 (2014). “Early childhood inclusion embodies the values, policies, and practices that support the right of every infant and young child and his or her family, regardless of ability, to participate in a broad range of activities and contexts as full members of families, communities, and society. The desired results of inclusive experiences for children with and without disabilities and their families include a sense of belonging and membership, positive social relationships and friendships, and development and learning to reach their full potential. The defining features of inclusion that can be used to identify high quality early childhood programs and services are access, participation, and supports (DEC/NAEYC, 2009, p 2).

In early childhood special education/early intervention, access, participation, and equity in natural and inclusive environments can be advocated for through the family-professional partnership. Resch et al. (2010) conclude that “caring for a child with a disability can be challenging, but many of these challenges are likely due to a lack of necessary environmental supports” (p. 149). Their study identified the most central area of concern for parents of children with disabilities as obtaining access to information and services. Pretti-Frontczak et al. (2002) and Mandell and Murray (2005) examined pre-service curricula which were designed to fully integrate the family-centered approach. The curricula aimed to strengthen students’ knowledge and application of a family-centered approach, including working collaboratively with families using a variety of experiences and strategies. Creating an environment of family-centered values was supportive in students developing skills to become effective practitioners.

**Component 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.

### **2.3 Knowledge Base**

The Council of Chief State School Officers (CCSSO), the Council for Exceptional Children (CEC), the Division for Early Childhood (DEC), and the National Association for the Education of Young Children (NAEYC) recognize that family partnership and collaboration is essential in supporting and improving learning outcomes and growth for children with disabilities. InTASC Standard 10 (CCSSO, 2013) identifies the importance of professional responsibility for leadership and collaboration as it discusses collaboration with learners, families, colleagues, other school professionals, and community members to ensure learner growth. The CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (2017) describes collaboration, in Standard 7, as critical to addressing the needs of learners when they state, that beginning educators must demonstrate the ability to collaborate with families, other educators, related service providers, individuals with exceptionalities, and personnel from community agencies in culturally responsive ways to address the needs of individuals with exceptionalities across a range of learning experiences. Standard 7 further elaborates on collaboration with families and caregivers through supporting families' choices, involving families in the development of goals and strategies, the implementation of services aligned with family resources, priorities, and concerns, and the evaluation of services as well as support throughout transitions. The Specialty Set also describes the role of families and the responsibility of the professional in engaging with and supporting families in the assessment process in Standard 4. Standard 6 describes the importance of respecting family choices and goals. NAEYC Standard 2 (2011) focuses on building family and community relationships as a foundation for successful early childhood education. Specifically, NAEYC highlights key elements, including knowing about and understanding diverse family and community characteristics, supporting and engaging families and communities through respectful, reciprocal relationships, and involving families and communities in young children's development and learning. NAEYC Standard 3 also highlights the importance of assessment partnerships with families in order to build effective learning environments (2011).

Parent participation has been a core, foundational concept since the inception of the Individuals with Disabilities Education Act (IDEA) in 1997 (Trainor, 2010b; Turnbull, 2001). The preamble of the Part C amendment states that Congress identified an "urgent and substantial need" to enhance the capacity of families to meet the special needs of their infants and toddlers (EHA Amendments of 1986, 42 U.S.C. sec. 671(a)). Furthermore, key components of the law include parental rights and safeguards that enable families to participate as full, equal team members in planning and decision-making.

The DEC Recommended Practices (2014) include a set of family practices that are considered fundamental to all other topic areas. They describe responsiveness to family's concerns, priorities, and changing life circumstances in F3, while F4 focuses on working together to create outcomes or goals and developing and implementing individualized plans aligned with family's priorities and goals. The professionals' role in supporting family functioning, promoting family confidence and

competence, and strengthening family-child relationships is also described in both F5 and F6. Further support for family engagement is seen in the DEC Recommended Practices definition of teaming and collaboration practices as “those that promote and sustain collaborative adult partnerships, relationships, and ongoing interactions to ensure that programs and services achieve desired child and family outcomes and goals” (2014, p. 15).

CEC’s High-Leverage Practices (McLeskey et al., 2017) reference seven specific principles of effective partnerships, as described by Turnbull et al. (2015) and includes a focus on respecting families by treating them with dignity, honoring cultural diversity, and affirming strengths as well as a focus on equality, described as sharing power and working together with families (McLeskey et al., 2017). More specifically, HLP2 highlights collaboration with families as guidance is provided for ensuring opportunities for families to be equal partners in planning through effective team meetings. Finally, in HLP3, the importance of collaboration with families to support student learning and to secure services is identified as a key practice.

There is a strong set of knowledge and research supporting the use of practices that engage families and support them in being equal partners in assessment, planning, and intervention/instruction. Research has shown that high levels of parental involvement in early childhood and elementary education correlate with improved academic performance, more positive attitudes toward school, fewer placements in special education, lower dropout rates, and fewer suspensions (Xu, 2019). Furthermore, research has indicated when parents are involved in their children’s early intervention, early childhood, and elementary and secondary school programs, better outcomes are realized (Dunst, 2002). One of the most common barriers to parent participation, as cited in the literature, includes the behaviors of special education professionals (Bezdek et al., 2010), including the use of jargon, poor communication, and lack of support for meaningful parent participation (Wolfe & Durán, 2013). Elbaum et al. (2016) attribute many of the challenges noted above to a lack of pre-service preparation related to skills, ethics, and behaviors that are required to build partnerships with families.

Mueller et al. (2019) identified major challenges experienced by graduates in the first few years, including challenges building and maintaining positive relationships with parents, scheduling meetings, obtaining support from colleagues and administrators, and experiencing low confidence leading meetings. Mueller et al. (2019) suggest inclusion of more pre-service opportunities which include real-world application, safe spaces to learn and make mistakes as well as opportunities to gain meaningful feedback in order to learn and practice strategies for fostering meaningful family-professional partnerships.

### **Standard 3: Collaboration and Teaming**

**STANDARD 3:** Candidates apply models, skills, and processes of teaming when collaborating and communicating with families and professionals, using culturally and linguistically responsive and affirming practices. In partnership with families and other professionals, candidates develop and implement individualized plans and successful transitions that occur across the age span.

Candidates use a variety of collaborative strategies while working with and supporting other adults.

- 3.1 **Component 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.

### **3.1. Knowledge Base**

The importance of collaboration and teaming is noted in InTASC Standard 10 (CCSSO, 2013). This standard emphasizes the significance of preparing candidates to collaborate with families, colleagues, and community constituents to support student learning and advance the profession. Similarly, Standard 7 in the CEC Preparation Standards (2015) stresses the importance of candidates collaborating with families, other educators and related service personnel, individuals with disabilities, and community agencies across a range of settings and learning experiences. NAEYC Standard 2 (2012) states that candidates will involve families and communities in their children's development and learning, which requires the ability to engage in effective collaboration. CAEP Elementary Standard 5 (2018) echoes the call for candidates to work collaboratively with colleagues toward common goals that influence students' development and growth. The CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (CEC, 2017) further identified the need for candidates to have an understanding of models and strategies of consultation and collaboration as well as the ability to apply models of team processes in early childhood to collaborate with caregivers, other personnel, and agencies.

Interdisciplinary approaches to service delivery, which require expertise in teaming and collaboration, gained legislative support with the passage of the Education of the Handicapped Act of 1986 (P.L. 94-142). Subsequent legislation and the amendments to the Individuals with Disabilities Education Act (IDEA) (2004) have offered clarification and recommendations associated with teaming to enhance professional collaboration.

The Council for Exceptional Children (CEC) also emphasizes the importance of collaboration in CEC's High-Leverage Practices (McLeskey et al., 2017). One practice focuses on collaboration with professionals to improve student outcomes (HLP1). Another practice addresses collaboration with families to support student learning and accessing services (HLP3). The Division for Early Childhood's (DEC) Recommended Practices (DEC, 2014) address practices focused on collaboration and teaming. They are described as practices that support adult partnerships, relationships, and interactions to ensure that programs and services achieve desired outcomes and goals for families and children. These practices also emphasize that team members assist each other in accessing and partnering with community services and programs. The first two DEC Recommended Practices focus on professionals from multiple disciplines and families working as a team in the planning and implementation of interventions (TC1, TC2). The third DEC Recommended Practice emphasizes the importance of effective communication among team members and group processes that enhance team functioning and relationships (TC3). The fourth practice (TC4) stresses that candidates, as

members of teams, should identify and use community-based informal and formal supports and resources to meet a family's self-identified needs, values, and interests. The final practice (TC5) encourages teams to select a primary liaison to support families and facilitate effective team communication.

Teaming models (such as interdisciplinary and transdisciplinary) and their characteristics and benefits are described in the literature (Woodruff & McGonigel, 1998). Sheldon and Rush (2013) add to these descriptions by differentiating the primary service provider approach from the transdisciplinary approach. Also provided in the literature are insights about factors and strategies that promote teaming and collaboration to support young children and families. Team members use technology and other forms of communication to develop collaborative relationships with families, other team members, and the community (Luke, 2019; Rosetti et al., 2017). Team members must share their expertise with one another by providing information, planning jointly, engaging in modeling and reflection, and providing performance feedback. For instance, Brookman-Frazer et al. (2012) described teaming strategies used with families to improve outcomes for their children diagnosed with autism spectrum disorder. The literature indicates that team members should be knowledgeable in their area of focus; create shared goals; use data to guide intervention planning; celebrate team accomplishments; and encourage open, honest, clear, and frequent communication (Bell, 2007; Hunt et al., 2004; Mattessich & Monsey, 1992). Considerable information is available on teaming and collaborative practices that support team effectiveness (Cohen & Bailey, 1997; Mattessich & Monsey, 1992; West et al., 2004).

Content related to teaming and collaboration practices has been recognized as important to include in personnel preparation programs (Guillen & Winton, 2015; Kilgo & Bruder, 1997; Kilgo et al., 2019; Rosenkoetter & Stayton, 1997; Sexton et al., 1997; Stayton, et al., 2001). Kilgo et al. (2019) addressed the important role pre-service personnel preparation programs play in preparing personnel from multiple disciplines to learn about and implement teaming and collaboration practices.

**Component 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.

### **3.2 Knowledge Base**

The need for candidates to know how to use a variety of collaborative strategies is noted in InTASC Standard 10 (CCSSO, 2013). Interprofessional skills such as communication, collaboration, and the use of technology are woven throughout the standards. The Council for Exceptional Children (2015) also identified the importance of collaboration in CEC Standard 7, which calls for candidates to learn to serve as a collaborative resource to colleagues and use collaboration to promote the well-being of children with exceptionalities across a wide range of settings and collaborators. Similarly, in Standard 2, NAEYC (2012) supports the need for candidates to engage in effective collaboration among families and communities to support children's learning and development. The CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (CEC, 2017) further emphasized the need for candidates to have skills in collaborating with other adults and agencies in

supporting children's learning, participating as team members and using teaming strategies, and employing adult learning principles in the consultation and coaching process with other professionals and families.

In the DEC Recommended Practices (2014), multiple collaborative strategies are highlighted depending on the service delivery model and location of services. With multiple professionals working in partnership with each family, there is a need for candidates to know how to use data-based decision-making to guide interventions as indicated in TC1. TC2 highlights the importance of candidates knowing how to share information and give feedback to other team members to improve child outcomes. CEC's High-Leverage Practices (McLeskey et al., 2017) also identify practices that focus on collaboration with professionals and families to support student learning and outcomes as well as access to services.

The literature provides support for candidates to be prepared to participate in teams with others to pool their collective expertise and exchange knowledge and competencies between team members (Cohen & Bailey, 1997; Hoegl & Gemuenden, 2001; Weiss et al., 2017; West et al., 2004). Further, there is support for the use of coaching strategies with caregivers (Friedman et al., 2012; Kaminski et al., 2008; Peterson et al., 2007) and other professionals (Fox et al., 2011; McCollum et al., 2013; Neuman & Cunningham, 2009) to improve outcomes for young children. The literature also supports the notion of candidates having knowledge of strategies associated with fostering positive relationships among team members. Studies have examined team member attributes (Bell, 2007), program attributes (Dinnebeil et al., 1999), decision-making using multiple perspectives (Hunt et al., 2004), communication and group facilitation, including team functioning (Flowers et al., 1999), and team leadership training (Hundert & Hopkins, 1992; West et al., 2003). Clearly, there is a research base to support teaming, collaboration, consultation, and co-teaching skills for early childhood special education candidates (Dinnebeil et al., 1996; Dinnebeil et al., 1999; Dinnebeil & McInerney, 2011; Friend & Cook, 2017; Olson et al., 1998).

**Component 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.

### **3.3 Knowledge Base**

InTASC Standard 10 (CCSSO, 2013) emphasized the need for candidates to know how to use a variety of collaborative strategies to support children and families. The Council for Exceptional Children (2015) in CEC standard 7 also identified the importance of candidates collaborating with families to address the needs of children with disabilities across a wide range of settings and collaborators as well as serve as a collaborative resource to colleagues. Further, NAEYC (2012), in Standard 2, stressed the importance of building family and community relationships through effective collaboration among families and communities to support children's learning and development. The CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (CEC, 2017) emphasized the need for candidates to have skills to assist families in



transition planning and implementing practices that support transitions among settings.

Specified in the IDEA Part C regulations (U.S. Department of Education, 2011) are requirements for transition planning from Part C (birth-3) to Part B 619 (preschool) special education services. These regulations indicate that planning is to be conducted by a team of professionals from the Part C agency and the local education agency, in addition to the family requiring the development of interagency and intra-agency agreements in the transition process. Research suggests that the most critical factor for successful transition to natural and inclusive environments may be a positive working relationship between the family and service providers (Kemp, 2003).

The DEC Recommended Practices (2014) indicate the need for candidates to collaborate with families and professionals to foster the development of individualized plans and to facilitate transitions. TC1 calls for teams, representing practitioners from multiple disciplines and families, to plan and implement supports and services that are designed to meet each child's and family's unique needs. The DEC Recommended Practices also emphasize that the team members assist each other in working with and accessing community-based services. They also highlight the importance of collaboration during transitions (TR1, TR2) by stating that "practitioners in sending and receiving programs exchange information before, during, and after transition....(DEC, 2014, p.16)"

Further, CEC's High-Leverage Practices (McLeskey et al., 2017) identify practices that focus on collaboration with professionals and families to support student learning and outcomes (HLP1) and result in effective meetings (HLP2). CEC's High-Leverage Practices also identify effective collaborative behaviors (sharing ideas, problem solving, negotiating) for professionals that focus on individualized instructional or behavioral planning to maximize student learning (HLP1) (McLeskey et al., 2017).

The literature supports the need for candidates to understand and consider the unique child, family, professional, and community factors that may affect collaboration and successful planning and implementation of intervention (Shonkoff et al., 1992). Further, the literature provides insight on factors and effective strategies that promote teaming and collaboration around supports for young children (Sloper et al., 2006).

The literature also emphasizes the importance of candidates knowing the components of transition planning and developing effective transition skills to ensure continuity of care in the lives of young children (Shonkoff & Phillips, 2000), specifically related to infant and toddler care (Kochanska et al., 2000) and young children with disabilities services (Kemp, 2003). Candidates must have communication skills (Rous et al., 2007) and planned and timed strategies to implement effective transition practices (Daly et al., 2011; Rous, & Hallam, 2012; Rous et al., 2010). The literature supports the need for candidates to collaborate with families and professionals in the development of individualized plans and the facilitation of effective transitions (Rous et al., 2007).

### Standard 4: Assessment Processes

**STANDARD 4:** Candidates know and understand the purposes of assessment in relation to ethical and legal considerations. Candidates choose developmentally, linguistically, and culturally appropriate tools and methods that are responsive to the characteristics of the young child, family, and program. Using evidence-based practices, candidates develop or select as well as administer informal measures, and select and administer formal measures in partnership with families and other professionals. They analyze, interpret, document, and share assessment information using a strengths-based approach with families and other professionals for eligibility determination, outcome/goal development, planning instruction and intervention, monitoring progress, and reporting.

**Component 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.

#### **4.1 Knowledge Base**

Understanding the purposes of assessment and choosing tools and methods to avoid bias is noted in InTASC Standard 6 (CCSSO, 2013). Standard 4 of the CEC Preparation Standards (2012) also identifies the importance of candidates understanding the need to use multiple methods of assessment and minimizing bias. In the NAEYC Standards (2012), Standard 3 echoes the call for candidates to understand the uses of assessment and to practice responsible assessment procedures. The CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (CEC, 2017) calls for candidates to understand legal requirements for eligibility (K4.2) as well as selecting tools based on their specific purpose (S4.4), using information from multiple sources and environments (S4.6), using a variety of materials and contexts to obtain valid information given the unique challenges of assessing infants, toddlers, and young children (S4.7), and finally using culturally unbiased assessments and procedures (S4.12).

IDEA (2004) has multiple requirements related to assessment, including the use of valid and reliable assessment tools and using multiple measures. In addition, the law requires that assessment tools “are selected and administered so as not to be discriminatory on a racial or cultural basis” and “are provided and administered in the language and form most likely to yield accurate information” (PL 108-446, Part B, sec. 614 (3)(A)(i)(ii)). Furthermore, Part C of IDEA (2004) stipulates similar requirements for infants and toddlers to include “family-directed identification of the needs of each family...to assist in the development of the infant or toddler” (PL 108-446, Part C, sec. 635(a)(3)).

Moreover, DEC’s Code of Ethics (2009) specifically states, “We shall use individually appropriate assessment strategies, including multiple sources of information such as observations, interviews with significant caregivers, formal and informal assessments to determine children’s learning styles, strengths, and challenges” (p. 2). NAEYC (2011) also address assessment practices in their code of ethics as follows: “I1.6 To use assessment instruments and strategies that are appropriate for the children to be assessed, that are used only for the purposes for which they were designed, and that

have the potential to benefit children. I1.7 To use assessment information to understand and support children’s development and learning, to support instruction, and to identify children who may need additional services” (p. 2).

These concepts are further supported through DEC’s Recommended Practices (2014) in the Assessment area, specifically with practices A3 through A8 in which the focus is on EI/ECSE professionals using multiple sources, adhering to appropriate assessment strategies and materials that take into account developmental appropriateness, and making needed accommodations for children’s sensory, physical, communication, cultural, and social- emotional characteristics. Similarly, in CEC’s High-Leverage Practices, Practice 4 in the assessment area indicates that professionals should “use multiple sources of information to develop a comprehensive understanding of a student’s strengths and needs” (McLeskey et al., 2017, p. 19).

The literature also supports the notion that assessment strategies and specific measures are to be designed with specific purposes in mind (National Research Council, 2008). It is important that candidates are prepared to understand and apply assessments according to their purpose. General purposes in EI/ECSE include screening or Child Find, determining eligibility for special education services or diagnosis, program planning, monitoring child progress, and program evaluation (McLean, 2014). Given issues of under-identification of infants and toddlers with developmental delays, Dunst et al. (2011) describe evidence-based procedures to improve child find outcomes through tailoring outreach to primary referral sources that EI/ECSE professionals include in their practices with children and families.

Once young children are in the evaluation process, valid, reliable assessment can be a challenge for the EI/ECSE professional. For example, Bagnato and colleagues (2007) document that many norm-referenced tests used in early childhood special education lack adequate inclusion of children with disabilities in their norm groups. Furthermore, Benner and Grim (2013) state that assessing infants, toddlers, and young children requires that the EI/ECSE professional have a clear understanding of early development, developmental progressions, and specific skills. For example, when assessing school-age children, it is common practice to separate children from their caregivers during the assessment process. In contrast, when EI/ECSE professionals are assessing infants, toddlers, and young children, it is recommended to have caregivers actively involved in the assessment process. In addition, as noted in Linder’s (2008) *Transdisciplinary Play-Based Assessment* the caregiver plays a primary role in engaging the child in play such that the context supports the child’s optimal display of current skill attainment. In addition, Duran et al. (2011) describe an evidence-based practice for effective evaluation of young children who are dual language learners that includes active and meaningful family participation using informal observations in natural environments that are to be implemented by EI/ECSE professionals. This fits nicely with Routines Based Interviews, a method promoted by McWilliam and colleagues (2011) as a valid method of assessment in early childhood special education. Moreover, Neisworth and Bagnato (2011) describe the use of informed opinion as a recommended assessment practice in determining eligibility in EI/ECSE when traditional testing would yield invalid results. Finally, EI/ECSE professionals using the Individual Growth and Development Indicators (IGDIs, Carta et al., 2010) for universal screening and progress monitoring are able to obtain far more individually reliable and valid snapshots of the child’s present level of development.

**Component 4.2.** Candidates develop and administer informal assessments and/or select and use valid, reliable formal assessments using evidence-based practices, including technology, in partnership with families and other professionals.

#### **4.2 Knowledge Base**

The need for candidates to know how to design, adapt, or select appropriate assessments is noted in Standard 6 of the InTASC Standards (CCSSO, 2013). InTASC Standard 6 further indicates the importance of using technology to support assessment practices. In the CEC Preparation Standards (2012), Standard 4 also identifies the importance of selecting technically sound assessments and using knowledge of measurement principles in collaboration with colleagues and families. The NAEYC Standard 3 (2012) echoes the call for candidates to use technology in the assessment process in partnership with families and professional colleagues. The CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (CEC, 2017) calls for assessing across developmental domains, play, and temperament (S4.3) and using informal and formal assessment tools and methods (S4.5).

The IDEA (2004) has multiple requirements related to assessment, including the use of valid and reliable assessment tools to be used for the purpose for which they were developed. In addition, the law requires that “the child is assessed in all areas of suspected disability” (or delay) (PL 108-446, Part B, sec. 614 (B)). Furthermore, Part C of IDEA (2004) stipulates similar requirements for infants and toddlers to include “family-directed identification of the needs of each family...to assist in the development of the infant or toddler” (PL 108-446, Part C, sec. 635(a)(3)). This clearly supports the need for candidates to work in partnership with families and other professionals.

Moreover, DEC’s Code of Ethics (2009) specifically states, “We shall use individually appropriate assessment strategies, including multiple sources of information such as observations, interviews with significant caregivers, formal and informal assessments to determine children’s learning styles, strengths, and challenges” (p. 2). NAEYC (2011) also addresses assessment practices in its code of ethics as follows: “I1.6 To use assessment instruments and strategies that are appropriate for the children to be assessed, that are used only for the purposes for which they were designed, and that have the potential to benefit children. I1.7 To use assessment information to understand and support children’s development and learning, to support instruction, and to identify children who may need additional services” (p. 2).

These concepts are also supported through DEC’s Recommended Practices (2014) in the Assessment area specifically with practice A10 in which EI/ECSE practitioners are to “use assessment tools with sufficient sensitivity to detect child progress, especially for the child with significant support needs” (p. 8). Again, in CEC’s High-Leverage Practices, Practice 4 in the assessment area indicates that professionals compile a comprehensive learner profile by developing and using a variety of strategies, including formal and informal tools (McLeskey et al., 2017).

The literature indicates a clear need to prepare candidates to select and use the appropriate

assessment tools and processes. Researchers provide ample guidance to EI/ECSE professionals in the use of valid and reliable evidence-based approaches in the assessment process. Snyder et al. (2014) outline the following four sources of evidence for EI/ECSE professionals to use to ensure score validity: content, internal structure, relationships with other variables, and the consequences of using the assessment tool. EI/ECSE personnel must be familiar with all aspects of the administration and scoring for specific assessment instruments to yield reliable results.

Duran et al. (2011) describe an evidence-based practice for effective evaluation of young children who are dual language learners by EI/ECSE professionals that includes active and meaningful family participation using linguistically responsive informal observations in natural environments. In addition, Edelman (2011) describes how EI/ECSE professionals can use technology such as digital videos to enhance authentic assessment and serve as a family friendly platform to provide information to caregivers. Finally, Benner and Grim (2013) indicate that a transdisciplinary model of assessment gives EI/ECSE professionals an opportunity to move toward an integrated model of development while tapping discipline specific expertise.

**Component 4.3.** Candidates analyze, interpret, document, and share assessment information using a strengths-based approach with families and other professionals.

#### **4.3 Knowledge Base**

The importance of candidates' ability to analyze student data in collaboration with others is noted in Standard 6 of the InTASC Standards (CCSSO, 2013). In the CEC Preparation Standards (2012), Standard 4 also identifies the importance of interpreting assessment results in collaboration with colleagues and families. NAEYC Standard 3 (2011) echoes the call for candidates to know about assessment partnerships with families and professional colleagues. Standard 3 of the CAEP Elementary K-6 Standards (2018) calls for candidates to interpret and use assessment results to improve instruction. Finally, the CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (CEC, 2017) calls for candidates to understand the role of the family in the assessment process (K4.1), including the ability to use a strengths-based approach (S4.9) in all facets of the assessment process.

Part C of IDEA (2004) requires evaluations for infants and toddlers to include "family-directed identification of the needs of each family...to assist in the development of the infant or toddler." (PL 108-446, Part C, sec. 635(a)(3)). Moreover, DEC's Code of Ethics (2009) specifically states, "We shall use individually appropriate assessment strategies, including multiple sources of information such as observations, interviews with significant caregivers, formal and informal assessments to determine children's learning styles, strengths, and challenges" (p.2). NAEYC (2011) also addresses assessment practices in its code of ethics as follows: "11.7 To use assessment information to understand and support children's development and learning, to support instruction, and to identify children who may need additional services" (p. 2). These concepts are also supported through DEC's Recommended Practices (2014) in the Assessment area, specifically with practice A1 in which EI/ECSE practitioners are to "work with the family to identify family preferences (p. 8)" and A11 in which they are to report assessment results so that they are understandable and useful to families. In CEC's High-Leverage Practices, Practice 5 in the assessment area indicates that professionals

interpret and involve families in the assessment process in order to collaboratively design educational programs (McLeskey et al., 2017).

Researchers in the field of EI/ECSE support the need to prepare EI/ECSE professionals to partner with families throughout the assessment process and to communicate using a strengths-based approach. Caspe and colleagues (2011) specifically state that professionals must be prepared to engage families in a strengths-based fashion to share “data about student progress and performance in an accessible, understandable, and actionable manner (p. 2).” The child’s overall development is affected by the interaction of the child’s family and environment (Hall et al., 2011). With this in mind, Dunst (2002) describes family-centered practices as a set of beliefs, principles, and values for supporting and strengthening the capacity of families to enhance and promote their children’s development. He further indicates that research supports the notion that family-centered approaches yield better outcomes than traditional child-centered approaches.

EI/ECSE professionals must invite families to participate in the assessment process. While the family’s involvement may vary based on their individual needs and preferences, the EI/ECSE professional will work together with the family to meet the family’s preference throughout the process. Families’ roles may include being consumers of information, informants, active team members in the assessment process, and advocates (Benner & Grim 2013).

EI/ECSE providers should tailor communication methods with families based on family preferences (Hall et al., 2011). An example of a family friendly platform to provide information to caregivers is the use of technology such as digital videos as part of an authentic assessment method (Edelman, 2011).

**Component 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.

#### **4.4 Knowledge Base**

In the CEC Standards (2012), Standard 4 focuses on how assessment data is essential for educational decision-making, including developing and implementing instructional programs. Additionally, in the NAEYC Standards (2012), Standard 3 focuses on using data from child-level assessment to promote positive child outcomes. In the CAEP Elementary Standards (2018), Standard 3 focuses on the use of assessment results to improve instruction and monitor learning. According to the CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (CEC, 2017), candidates must connect assessment to curriculum and progress monitoring [ECSE.K4.4], use assessment data to develop and implement individualized plans for children [ECSE.S4.8], and use assessments to monitor instructional assessment [ECSE.S4.11].

Using assessment data to plan for goals and instruction is a requirement of IDEA Parts B and C (IDEA, 2004). EI/ECSE professionals are to participate on teams, including other professionals and families, to use assessment results to plan for services and individualized programming (e.g.,

Individualized Family Service Plans [IFSP] and Individualized Education Plans [IEP]). For both infants and toddlers with disabilities and delays (ages birth to 3) and young children with disabilities (ages 3-8), building individualized programming (e.g., IFSP, IEP) in collaboration with families is a critical part of special education services (IDEA, 2004).

NAEYC's Developmentally Appropriate Practices Position Statement (2009) recommends that professionals use assessment results to inform the planning and implementation of instruction, to evaluate and improve programs' effectiveness [Guideline 4A], and to plan curriculum and learning experiences [Guideline 4C]. DEC Recommended Practices (2014) address guidance on how EI/ECSE professionals implement assessment to determine the child's plan for instruction [A8], identify learning targets, plan activities, and monitor child progress [A9]. CEC's High- Leverage Practices focus on how professionals are to interpret and communicate assessments to design and implement educational programs [HLP5] as well as on professionals using child assessment data to analyze instructional practices and make adjustments to improve child outcomes [HLP6] (McLeskey et al., 2017).

Research indicates the need for EI/ECSE professionals to be prepared to collaborate with other professionals and families in the early childhood special education assessment process. Research shows that families who are more involved in the assessment process yield better child-level outcomes (Shonkoff, 2010). Research also shows that throughout this assessment and goal-building process families are a part of the team and add valuable input as to whether or not goals are socially valid for the child and their family (Bailey et al., 2012). As pertains to progress monitoring, Walker et al. (2008) found that growth and development indicators can be used effectively for both progress monitoring and intervention decision-making for young children. Otaiba and Lake (2007) found that pre-service teachers used curriculum-based assessment data to describe students' response to instruction after they were prepared to use this assessment technique with second grade students.

### **Standard 5: Application of Curriculum Frameworks in the Planning and Facilitation of Meaningful Learning Experiences**

**STANDARD 5:** Candidates collaborate with families and professionals to use an evidence-based, developmentally appropriate, and culturally responsive early childhood curriculum addressing developmental and content domains. Candidates use curriculum frameworks to create and support universally designed, high quality learning experiences in natural and inclusive environments that provide each child and family with equitable access and opportunities for learning and growth.

**Component 5.1:** Candidates collaborate with families and other professionals in identifying an evidence-based curriculum addressing developmental and content domains to design and facilitate meaningful and culturally responsive learning experiences that support the unique abilities and needs of all children and families.

## **5.1 Knowledge Base**

Collaboration with families and professionals is fundamental to provide optimal educational services for children. Initially, the collaborative efforts to make curriculum accessible and individualized for all children require effective communication with families and other professionals to develop a clear understanding of children's needs and development. This foundational theme is emphasized in InTASC Standard 1 (CCSSO, 2013); in CAEP Standard 1 (2018); and in NAEYC Standard 2 (2011). Another aspect of this collaboration is demonstrated by identifying and exchanging useful information and resources (InTASC Standards 2, 8, 9, and 10) and viewing families as rich sources of information (InTASC Standards 4 and 7) that can be used in planning meaningful learning opportunities for children. InTASC Standard 1 (2013) also calls for candidates, families, and other professionals to work together as a team to identify appropriate curricular modifications and effective interventions.

The DEC's Recommended Practices (2014) in the Family area as well as the Teaming and Collaboration area highlight effective practices relevant to teaming and collaboration with families, which include sharing and exchanging information, planning and implementing educational programs, and facilitating communication among team members. Specifically, DEC's Recommended Practice F4 (2014) and CEC's High-Leverage Practice 3 (HLP3) (McLeskey et al., 2017) call for EI/ECSE professionals to involve families and professionals in determining appropriate learning expectations, common goals, and different levels of support. In order for the curriculum to meet the needs of all children, EI/ECSE professionals need to develop a clear understanding of children's linguistic and cultural backgrounds and consider this as a valuable asset in modifying curricula and planning relevant and accessible learning activities. Being a culturally responsive EI/ECSE professional is underlined in DEC Recommended Practice F8 (2014).

Collaboration with families and professionals is the vehicle to improve the quality of EI/ECSE services and young children's outcomes. The Individuals with Disabilities Education Improvement Act (IDEA, 2004) includes a mandate that states families are essential members in the educational team and in the educational decision-making process. Further, it is critical for EI/ECSE professionals to involve families in all decisions related to curriculum because, by law, families are the legal advocates for their children in all aspects of their life, including education (Wilmshurst & Brue, 2018). As the U.S. Department of Health and Human Services and the U.S. Department of Education (2015) stipulate, failure to provide access to the general curriculum and high quality programs is one of the barriers to fully including children in the educational system. Without appropriate access, children and their families are deprived of their fundamental right to receive equal educational opportunities. The DEC/NAYEC (2009) position paper on inclusion demonstrates the support for this notion in that accessibility of early childhood programs is defined as the removal of all barriers that prevent children from receiving equitable opportunities to fully participate in general education programs.

By definition, curriculum addresses a continuum of developmental and academic areas that are crucial for preparing children to become independent members of their society (NAEYC, 2009). Thus, curriculum application is not limited to a specific environment and setting, and it can take place in various environments and settings that promote children's learning and development. EI/ECSE



professionals must strive to make the curriculum as functional as possible for children, where skills and knowledge are meaningful for children and their families, applicable in their everyday living, and supportive of the ultimate goal of helping families to raise independent individuals. In order to accomplish this goal, EI/ECSE professionals, as noted in the DEC Recommended Practices in the Family area (2014), need support from families and other professionals to formulate a shared vision for each child, to identify strengths and unique needs for each child, and to define appropriate contexts and levels of support needed to promote children's acquisition and generalization of knowledge and skills.

The IDEA (2014) well as the DEC Recommended Practices (DEC, 2014) acknowledge the importance of collaboration with other professionals to meet the individual needs of children. There are several benefits to collaborating with professionals from related services, one of which is that EI/ECSE professionals will be more confident and successful in supporting families and their children. Further, collective efforts between EI/ECSE professionals and related service professionals save time, effort, and resources. For example, in an effective collaborative environment, families are not forced to alter their normal daily activities in order to make time for educational services at home or after school (Dettmer et al., 2013). Collaboration with professionals from different disciplines also supports the team's efforts to meet the diverse learning needs of children. Input from multiple stakeholders can be valuable in planning and implementing appropriate curricular adaptations and modifications.

EI/ECSE professionals also collaborate with families and other professionals to create culturally responsive learning opportunities as noted in the DEC position paper on cultural and linguistic diversity (DEC, 2010). EI/ECSE professionals can accomplish this by being socially and culturally conscious and acknowledging that the social context and the geographical location have an impact on families' attitude, behavior, thinking, and way of life (Villegas & Lucas, 2002). EI/ECSE professionals understand that children make meaning of new learning experiences based on their cultural references. Therefore, family involvement in planning and implementing the curriculum is vital in helping EI/ECSE professionals make adaptations to the curriculum that will meaningfully engage children in their learning environments. Villegas and Lucas (2002) propose a vision for preparing culturally responsive teachers. At the center of this vision is the implementation of culturally responsive practices. According to this vision, EI/ECSE professionals should aspire to develop a comprehensive understanding of children's culture and learn how to employ this knowledge to make the general curriculum accessible for diverse children. It is also recommended that EI/ECSE professionals be engaged in sincere conversations with families and professionals about topics that are relevant to children's culture but not addressed in the curriculum. These candid conversations will provide families and professionals with meaningful opportunities to examine the curriculum and highlight any inaccuracies, myths, imprecisions, and biased content (Ellerbrock et al., 2016). Simultaneously, it will provide families and professionals with an outlet to suggest adaptations and modifications to broaden the focus of the curriculum and make it more culturally sensitive.

**Component 5.2:** Candidates use their knowledge of early childhood curriculum frameworks, developmental and academic content knowledge, and related pedagogy to plan and ensure

equitable access to universally designed, developmentally appropriate, and challenging learning experiences in natural and inclusive environments.

## **5.2 Knowledge Base**

InTASC Standards 4 and 8 (CCSSO, 2013) highlight the importance of using Universal Design for Learning (UDL) principles in providing children with equitable access to the curriculum by using methods that match their learning. The NAEYC Standard 4 (2011) and CAEP Elementary Education Standard 4 (2018) call for using different learning approaches in order to support all children in meeting their learning outcomes. Further, InTASC Standard 4 (2013), CAEP Elementary Education Standard 2 (2018), and NAEYC Standard 5 (2011) underline the importance of candidates being knowledgeable of the different content areas and academic subjects as well as being skillful in identifying meaningful opportunities in these areas to make learning more accessible for all children.

DEC Recommended Practice E3 (2014) clearly supports the implementation of UDL principles to address making learning environments accessible for all children. CEC's High-Leverage Practices 11 and 19 (McLeskey et al., 2017) explicitly note that EI/ECSE professionals use the UDL principles throughout the teaching process, which includes the following: selecting, implementing, designing, and evaluating learners' outcomes in order to support equitable access to the general curriculum for each and every learner.

The call to use curriculum frameworks clearly highlights the fundamental role of EI/ECSE professionals in early childhood programs and schools. Currently, EI/ECSE professionals are expected to identify creative ways for children to access the general education curricular content; plan and implement evidence-based practices in content areas such as language, math, and science; envision how curriculum frameworks can be applied across developmental domains as well as academic subjects; and lead and be involved in making data-based instructional decisions for children throughout the age range from birth to 8 years old (CEC, 2017). EI/ECSE professionals are expected to perform all these roles while working in teams that include but are not limited to families, general education teachers, professionals from related services, and other professionals. Even though EI/ECSE professionals are not required to show expertise in all the disciplines that are included in IEP and IFSP teams, they do need to show expertise in relevant academic and content areas (e.g., math and science) in order to be able to skillfully provide EI/ECSE supports and services to children and effectively collaborate with team members (Benedict et al., 2016).

In their position statement for including children with disabilities, the DEC and NAEYC (2009) addressed the need for systems that support children's participation in all learning environments and within the general education curriculum. Tiered frameworks were suggested as a meaningful addition to and not as a replacement for the curriculum (Freeman & Newcomer, 2015). Tiered frameworks provide systematic structure for adapting and individualizing content, learning activities, experiences, and opportunities for children. These frameworks support professionals in delivering proper levels of support based on children's needs and progress in the general curriculum (Hemmeter et al., 2016; Horn et al., 2016). Tiered frameworks are also important in facilitating

children's engagement and learning in general education environments and in providing a structure for implementing systematic interventions across developmental domains and content areas at home and in school (Forman & Crystal, 2015). One of the common considerations among the various tiered frameworks is the need for collaborative efforts between professionals and families in identifying an appropriate tiered framework, preparing implementation plans, and collaborating in applying the framework with fidelity in all of the appropriate learning contexts to support children's learning outcomes.

EI/ECSE professionals are integral members of tiered frameworks teams. As members of these teams, EI/ECSE professionals may be leading this collaborative effort for identifying meaningful opportunities and seek families' and professionals' input and feedback in planning and implementing these frameworks. Professionals also acknowledge that the success of planning and implementing these frameworks depends to a great extent on the positive collaborative relationships that exist amongst the team members (DEC, 2013).

Universal Design for Learning (UDL) is a research-based framework that provides *all* children, including children with disabilities, with the opportunity to not only access early childhood curriculum, but to do so in a way that meaningfully engages them in learning, thereby maximizing their full potential (Horn et al., 2016; Rose & Meyer, 2006). UDL is guided by the philosophy that there is no such thing as a one-size-fits-all approach to learning. In fact, The Center for Applied Special Technology (CAST) describes UDL as "a framework that addresses the primary barrier to fostering expert learners within instructional environments: inflexible, "one-size-fits-all" curricula. It is inflexible curricula that raise unintentional barriers to learning" (CAST, 2011, p. 4). Recent meta-analytic findings suggest UDL can and should be used effectively by EI/ECSE professionals to minimize these unintentional barriers to learning for children with a wide range of learning needs, especially children with disabilities (Al-Azawei et al., 2016; Mangiatordi & Serenelli, 2013; Rao et al., 2014). Currently, early childhood programs and schools expect EI/ECSE professionals to be proficient in inclusive education pedagogy in order to provide children with equitable access to the curriculum (Blum & Parette, 2014). EI/ECSE professionals are called to use UDL to address the diverse learning needs of not only children with disabilities, but also the needs of at-risk children who have not yet been identified for special education services (Dunst & Hamby, 2015; Horn et al., 2016). Lesson plans designed using the three guiding principles of the UDL framework can minimize learner differences, while providing children with increased opportunities to engage in appropriately challenging learning activities (Courey et al., 2012)

### **Standard 6: Using Responsive and Reciprocal Interactions, Interventions, and Instruction**

Candidates plan and implement intentional, systematic, evidence-based, responsive interactions, interventions, and instruction to support all children's learning and development across all developmental and content domains in partnership with families and other professionals. Candidates facilitate equitable access and participation for all children and families within natural and inclusive environments through culturally responsive and affirming practices and relationships. Candidates use data-based decision-making to plan for, adapt, and improve interactions, interventions, and instruction to ensure fidelity of implementation.

**Component 6.1:** Candidates, in partnership with families, identify systematic, responsive, and intentional evidence-based practices and use such practices with fidelity to support young children’s learning and development across all developmental and academic content domains.

### **6.1 Knowledge Base**

InTASC Standard 8 highlights the necessary skills required for candidates to be skillful in selecting evidence-based practices (CCSSO, 2013). Candidates, according to this standard, know when and how to use appropriate and varied strategies and resources to design instruction to meet the needs of learners, both individually and in groups. Both the CAEP K-6 Elementary Standard 4 (2018) and NAEYC Standard 4 (2010) emphasize that candidates must know about and use a variety of effective instructional practices that support children’s learning. NAEYC Standard 4 further states that these practices be developmentally appropriate. The CEC Initial Preparation Standard 5, says that candidates “... use a repertoire of evidence-based instructional strategies to advance learning of individuals with exceptionalities” (2015, p.25). The CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (2017) requires that candidates integrate those evidence-based practices into individualized plans that align with developmental and academic content (ECSE5.S10) (CEC, 2017). Both the DEC Recommended Practices (2014) and the CEC High Leverage Practices (McLeskey, et al., 2017) include practices that align with the above standards. The DEC Family Recommended Practice (F4) states that EI/ECSE professionals and families collaborate to develop instructional goals, individualized plans, and implement practices that promote the child’s development and learning. The DEC Instruction Recommended Practices (INS 6) (2014) calls for implementing evidence-based practices with fidelity (DEC, 2014). Additionally, CEC’s High Leverage Practice 18 emphasize that EI/ECSE professionals use a variety of strategies that have been shown to empirically increase student engagement and learning. Legislation also lends support for this component (McLeskey, et al., 2017). Both the Every Student Succeeds Act (2015) and IDEA (2014) emphasize the use of scientifically-based instructional practices to improve learner’s academic achievement and functional performance.

The Council for Exceptional Children calls upon teacher preparation programs across the nation to use a systematic and disciplined approach to prepare candidates to identify and implement evidence-based practices in various educational settings (CEC, 2015). However, Hsiao et al., (2019) concluded that 40 percent of special education teachers who work with students with Autism Spectrum Disorder receive little to no training relevant to evidence-based practices. Therefore, the researchers recommend that preservice preparation programs specifically address evidence-based practices in their curriculum and prepare educators to consistently implement those practices in educational settings. Reichow (2016) described a two-step process for use by EI/ECSE professionals in evaluating and selecting evidence-based practices. The first step is based on a thorough evaluation of individual studies that report positive outcomes about the target practice. The second step is to identify the amount of support that is available about the evidence. Once the evidence is evaluated, EI/ECSE professionals select the best-fit practice to address the developmental or academic need. Researchers further emphasize the importance of EI/ECSE professionals implementing practices with fidelity.

Shepley and colleagues (2018) reported that EI/ECSE professionals need to be knowledgeable and skillful in collecting fidelity data to ensure that practices are delivered as planned and in a consistent manner. The systematic process for evaluating, selecting, and implementing practices with fidelity requires the educational team, including the family requires continual interaction in making decisions about effective interactions, interventions, and instruction.

**Component 6.2:** Candidates engage in reciprocal partnerships with families and other professionals to facilitate responsive adult-child interactions, interventions, and instruction in support of child learning and development.

## **6.2 Knowledge Base**

Several sets of professional standards address the importance of supporting candidates in learning to develop partnerships with other professionals and families to create effective learning opportunities to support the diverse needs of all learners. InTASC Standard 7 (CCSSO, 2013) indicates that candidates plan and deliver effective instruction with other professionals who have specialized expertise and that they also collaborate with families in planning for instruction. InTASC Standard 10, (CCSSO, 2013) emphasizes that candidate collaborate with families and other professionals to ensure learner growth. The CAEP K-6 Elementary Standard 1 (2018), states that candidates work reciprocally with families to gain a perspective of the child's strengths and needs in order to maximize development and learning, while Standard 5, focuses on collaboration with other professionals and the student's mentors to work on goals directly related to the learner's growth and development. Likewise, NAEYC Standard 2, (2010) emphasizes that candidates develop reciprocal family relationships as a means to involve families' in the child's development and learning. The CEC Initial Preparation Standard 7 (2015), states that candidates collaborate with families and professionals to meet the needs of students with exceptionalities. The CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (CEC, 2017) expands on the CEC standard specifying that a goal of collaboration is to support children's development and learning.

The DEC Family Recommended Practice (F4) (DEC, 2014) states that EI/ECSE professionals and families collaborate to develop instructional goals, individualized plans, and implement practices that promote the child's development and learning. DEC Recommended Practice TC1 (2014) states that EI/ECSE professionals work as a team with other professionals and families to "... plan and implement supports and services to meet the unique needs of each child and family." Further, DEC Recommended Practices INS 1 and 2 (2014) indicate that EI/ECSE professionals, with the family, identify the child's strengths, preferences, and interests and use these to jointly identify target skills for instruction. CEC's High Leverage Practice 1 (McLeskey, 2017) refers to collaboration with a range of professionals as critical to support students' learning.

Legislative support for reciprocal partnerships with families and professionals is included in IDEA (2014) which mandates parent participation in the education of their children with disabilities. Further, IDEA requires for multidisciplinary assessment of students' to determine eligibility for services and to identify target goals and outcomes for instruction. IDEA also requires that

individual plans be developed by a multidisciplinary team that includes both parents and professionals.

Effective professional teaming and collaboration and parent engagement lead to meaningful partnerships and improved student learning (Collier et al., 2015). Ongoing communication between parents and educators has been shown to be critical to predict student success (McCoach et al., 2010). Further, several effective collaboration strategies have been identified that are associated with effective partnerships and effective instruction (Ronfeldt et al., 2015). These include active listening, good communication, and ongoing coaching (Scruggs & Mastropieri, 2015).

**Component 6.3:** Candidates engage in ongoing planning and use flexible and embedded instructional and environmental arrangements and appropriate materials to support the use of interactions, interventions, and instruction addressing developmental and academic content domains, which are adapted to meet the needs of each and every child and their family.

### **6.3 Knowledge Base**

InTASC Standard (CCSSO, 2013) addresses the role that candidates have in creating learning environments that support each child's "... positive social interaction, active engagement in learning, and self-motivation (p. 12)." .InTASC Standard 8, Planning for Instruction, states that candidates plan instruction to meet the learning goals of each learner by creating learning experiences based on knowledge of curriculum and content areas.

Similarly, the CAEP K-6 Elementary Standards 1, 2 and 3 (CAEP, 2018) emphasize that candidates plan and implement developmentally appropriate, inclusive learning environments that facilitate access to learning experiences based on knowledge of curricular standards and content. Further, candidates create classroom contexts that allow for differentiation of instructional materials and activities and establish social norms within the classroom that support interpersonal relationships and social and emotional development. The same focus on candidates designing supportive and challenging learning environments that promote positive relationships and interactions, while planning for learning experiences based on their knowledge of developmental domains and academic disciplines, is found in NAEYC Standards 1, 4, and 5. (NAEYC, 2011).

The CEC Initial Preparation Standard 2 (CEC, 2015) also identifies candidates' role in creating safe, inclusive, and culturally responsive learning environments that support learning, emotional well-being, and positive interactions. CEC Standard and CEC Standard 5 state that candidates use knowledge of general and specialized curricula and consider individual abilities and learning environments in planning for and adapting learning experiences. Moreover, the CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (CEC, 2017) includes ECSE2.S1 which states that candidates "select, develop, and evaluate ... materials, equipment, and environments." In addition, ECSE3.S2 says that candidates plan developmentally appropriate curricula, instruction, and adaptations based on their knowledge of the child and developmental and academic curricula.

The DEC Environment Recommended Practices (DEC, 2014) address the importance of EI/ECSE professionals modifying and adapting the physical, social and temporal environments to promote children's access to and participation in learning experiences (E3) in natural and inclusive environments during daily routines and activities (E1). And the DEC Instruction Recommended Practices emphasize EI/ECSE professionals' role in embedding instruction within and across activities and routines (INS5) and identifying target skills to help the child become competent, socially connected and engaged (INS2) while providing the adaptations needed for each child to learn. Several of the CEC's High Leverage Practices (McLeskey et al., 2017) lend support to this component and include: (HLP7) establish a consistent, organized, and respectful learning environment, (HLP17) use flexible grouping, (HLP13) adapt curriculum tasks and materials for specific learning goals, and (HLP21) teach students to maintain and generalize new learning across time and settings.

Examples of environmental adaptations and modifications to the physical environment that have been documented to support young children's learning include changing task directions and adjusting content amount and depth (Vaugh & Bos, 2012); providing scaffolded supports (Berk & Winsler, 1995; Rosenshine, 2012) and using visual supports or cues (Odom et al., 2010). Examples of modifications to the social environment that have been documented as effective include providing a mix of instructional groupings (Cabell et al., 2013) and peer mediated support (Strain et al., 1979). Examples of considering the temporal environment that have been shown to be effective include use of a visual schedule to support children's engagement and ability to transition between activities (Odom et al, 2010) and the use of the "if then" or premack principles (DePry, 2004). Given this strong empirical evidence, it is imperative that preparation programs prepare candidates to apply such evidenced-based instructional strategies and environmental arrangements.

Intentional teaching and embedded instruction, two evidenced based approaches, when used together ensure that each child has access to and actively participates in the daily activities and routines of the multiple environments of the child and family (Grisham-Brown et al., 2017). Intentional teaching involves a carefully planned balance between child-directed and teacher lead activities (Epstein, 2016). Effective intentional teachers are able to recognize to natural opportunities for children's engagement in learning and plan for and implement learning opportunities. With embedded instruction, the EI/ECSE professional creates short, intentional teaching episodes within ongoing, natural routines and activities (Horn et al., 2002; Snyder et al., 2013). Use of embedded instruction and intentional teaching leads to important developmental and learning outcomes. Therefore, it is vital that preparation programs fully prepare candidates to implement these practices.

**Component 6.4:** Candidates promote young children's social and emotional competence and communication, and proactively plan and implement function-based interventions to prevent and address challenging behaviors.

#### **6.4 Knowledge Base**

InTASC Standard 1 (CCSSO, 2013), states that candidates apply understanding of learner

development to promote learner growth and development across developmental domains. Further, INTASC Standard 3 focuses on candidates creating challenging and supportive environments that engage learners and support their interpersonal communication skills. InTASC Standard 8 guides candidates to utilize a wide range of instructional strategies including those that support and expand learners' communication.

The CAEP Elementary Education Standards (2018) offer additional support for the importance of social-emotional and communication and attention to behavioral needs. Standard 3 states that candidates create classroom contexts that allow for differentiation of instructional materials and activities and establish social norms within the classroom that support interpersonal relationships and social and emotional development. Under Standard 4 the importance of preparing candidates to use constructive feedback to guide children's learning, increase motivation, and increase learner engagement is addressed.

NAEYC Professional Preparation Standard 1 (2011) stresses the importance of candidates possessing a deep understanding of child development, including the social-emotional and communication domains. NAEYC Standard 4 stresses that candidates understand and use positive relationships and supportive interactions as the foundation of their work with children and families.

The CEC Personnel Preparation Standard 1(CEC, 2015) also ensure that candidates understand learner development. CEC Standard 2 says that candidates create learning environments that allow learners to develop emotional well-being, positive social interactions, and self- determination. Further, CEC Standard 5 addresses candidates' use of augmentative and alternative communication systems and assistive technology along with general strategies to enhance language development and communication skills in children.

The CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (CEC, 2017) stresses the importance of understanding factors that affect the mental health and social-emotional development of infants and young children (K1.6). K1.9 highlights the importance of understanding the impact of language delays on other areas of development and K1.10 adds behavior. Section 2 emphasizes that candidates understand the effects of social environments on development and learning (ECSEK2.1) and structure social environments, using peer models and proximity, and responsive adults to promote interactions among peers, parents, and caregivers (ECSE2.S4). Section 3 (ECSE3.S3), specifies the importance of implementing and evaluating preventative and reductive strategies to address challenging behavior. Finally, the skill items for Section 5 highlight the importance of using individual and group guidance and problem-solving techniques to develop supportive relationship with and among children (ECSE5.S4), and the use of strategies to teach social skills and conflict resolution (ECSE5.S5).

In terms of legislation, IDEA identifies areas of eligibility which include social-emotional, communication, and behavior areas. The law also specifically states that functional behavior assessments should be conducted and behavior intervention plans should be implemented to address challenging behaviors.



The DEC Recommended Practices (DEC, 2014) also lend support for focusing on social- emotional and communication development as well as a functional approach to behavioral assessment and intervention. The Recommended Practices indicate that EI/ECSE professionals should assess children in all areas of development and behavior (A.4). Further, under Environments, EI/ECSE professionals are directed to work with others to modify not only physical environments, but also social and temporal environments to ensure children have access and participation in learning activities (E3). The Recommended Practices for Instruction focus on planning instruction to ensure children become adaptive, competent, socially connected, and engaged (INS2) and that systematic instructional strategies are used with fidelity to teach skills and promote child engagement and learning (INS6). The use of peer- mediated intervention is also promoted in INS8. Specific to behavior, INS9 guides EI/ECSE professionals to use functional assessment and related prevention, promotion, and intervention strategies across environments to prevent and address challenging behavior. The Interaction Recommended Practices also address the importance of this component. For example, EI/ECSE professionals are directed to promote children’s social-emotional development by observing, interpreting, and responding contingently to the range of the child’s emotional expressions (INT1). Further, EI/ECSE professionals should promote the child’s social development by encouraging the child to initiate or sustain positive interactions with other children and adults during routines and activities through modeling, teaching, feedback, or other types of guided support (INT2). Finally, EI/ECSE professionals are encouraged to promote children’s communication development by observing, interpreting, responding contingently, and providing natural consequences for the child's verbal and non-verbal communication (INT3).

CEC’s High Leverage Practices (McLeskey et al., 2017) detail recommendations that include the use of multiple sources of information, including information related to social-emotional and communication development as well as functional behavior assessment, to develop comprehensive understandings of children’s strengths and needs (HLP4). Further, an entire subset of the practices focus on social/emotional/behavioral practices. These include guidance for teachers to establish a consistent, organized, and respectful learning environment (HLP7), to provide positive and constructive feedback to guide learning and behavior (HLP8), to directly teach social behaviors (HLP9), and to conduct functional behavior assessments to develop individual student behavior support plans (HLP10).

The importance of social-emotional development to school success and school readiness has been well-established. Landy (2009) labeled social-emotional competence as central to success in school and in life and stressed how vital it is that EI/ECSE professionals enter the field ready to promote children's social and emotional health. Thompson and Raikes (2007) discuss the link between social, emotional, and self-regulatory skills and later school success emphasizing that readiness is significantly influenced by relationships and social contexts.

In a policy report on the importance of young children’s emotional development for their school readiness, Raver (2002) states, “Children who are emotionally well-adjusted have a significantly greater chance of early school success while children who experience serious emotional difficulty face an increased risk of early school difficulty” (p.3). The report also includes a review of research on related intervention and reports that findings suggests that, “while young children’s emotional

and behavioral problems are costly to their chances of school success, these problems are identifiable early, are amenable to change, and can be reduced over time” (p. 3). In a study investigating the relationships between behavioral regulation and preschoolers’ literacy, vocabulary, and math skills, McClelland et al., (2007) reported that “behavioral regulation significantly and positively predicted fall and spring emergent literacy, vocabulary, and math skills on the Woodcock Johnson Tests of Achievement (all  $ps < .05$ ). Moreover, growth in behavioral regulation predicted growth in emergent literacy, vocabulary, and math skills over the prekindergarten year (all  $ps < .05$ ), after controlling for site, child gender, and other background variables” (p. 947).

It is essential that early childhood practitioners are prepared to identify, effectively address, and prevent social-emotional challenges early. As noted by Hemmeter and colleagues (2006), engaging environments that include ongoing positive adult-child interactions are necessary for children’s social and emotional development and the prevention of challenging behavior. Therefore, in order to effectively promote children’s social emotional competence and communication, candidates must be prepared to create, maintain, and facilitate such positive environments.

To effectively address social-emotional development and challenging behavior, the field guides practitioners to utilize multi-tiered systems of support as frameworks to provide positive behavior support (PBS) such as the Pyramid model. The Pyramid Model is a multi-tiered system of support focused on preventing challenging behavior through universal and targeted practices focused on promoting social emotional competence and teaching targeted social emotional skills (Fox et al., 2003; Fox et al., 2009). Functional behavior assessment is an important component of the Pyramid Model and leads to the creation of a behavior support plan. The effectiveness of PBS, including the use of functional behavior assessment and positive behavior support plans, is well documented for young children including those with and without disabilities and very young children (Dunlap & Fox, 2011).

**Component 6.5:** Candidates identify and create multiple opportunities for young children to develop and learn play skills and engage in meaningful play experiences independently and with others across contexts.

### **6.5 Knowledge Base**

The need for candidates to be knowledgeable about children’s play are emphasized across the InTASC Standards (CCSSO, 2013). For example, developmentally appropriate instructional opportunities that promote student learning and learning environments that support individual and collaborative learning and encourage social interactions and active engagement are emphasized in InTASC Standard 1. NAEYC Professional Preparation Standard 4 (2011), emphasizes that candidates use a wide variety of developmentally appropriate approaches and instructional strategies to promote young children’s development. The supporting explanation for this Standard identifies several research-based strategies that are directly related to learning and developing play skills, such as, teaching through social interactions, creating support for play, fostering oral language and communication, and setting up the indoor and outdoor environment.

The CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (CEC, 2017) emphasizes that candidates know and understand theories of typical and atypical development (ECSEK.K1) which include play development. In designing the learning environment, candidates “select, develop, and evaluate developmentally and functionally appropriate materials, equipment, and environments (ECSE2.S1).” For young children, this includes materials and environmental arrangements that facilitate play development. In planning curriculum, candidates apply research in the developmental domains, play, and temperament to learning (ECSE 3.S1). And finally, candidates “facilitate child-initiated learning (ECSE5.S1) through the use of scaffolding (ECSE5.S2), and strategies that teach social skills (ECSE5.S5), a major aspect of play development.

DEC Recommended Practices (DEC, 2014) also emphasize the importance of ensuring candidates have the knowledge and skills to support children’s play. The recommended practices indicate that “young children who have or are at risk for developmental delays/disabilities learn, play, and engage with adults and peers within a multitude of environments such as home, school, child care, and the neighborhood (2014, p. 9).” DEC also emphasizes that EI/ECSE professionals use explicit feedback and consequences to increase children’s play skills (see INS7, DEC, 2014, p. 12) and promote the child’s development by joining in and expanding on the child’s play (see INT4, DEC, 2014, p. 14). Several of CEC’s High Leverage Practices (HLP) (McLeskey et al., 2017) are important when promoting children’s learning and development of play skills. EI/ECSE professionals must create a consistent, organized, and respectful learning environment (HLP7) to encourage young children’s play.

They must also design instruction focused on specific learning goals (HLP12) which for young children may be mastered effectively through play. And finally, EI/ECSE professionals provide scaffolded supports to facilitate learning (HLP15).

All children should have opportunities to learn in the context of play with their peers with and without disabilities (US DHHS & DOE, 2015), which highlights that candidates should understand the importance of play. The United Nations Human Rights Office of the High Commissioner asserted that play is the right of every child because it “is essential to the cognitive, physical, social, and emotional wellbeing of children and youth” (Ginsburg et al., 2007, p. 182). Play is an early developmental milestone and provides an important context for learning other critical skills (American Academy of Pediatrics [AAP], 2007; Ginsburg et al., 2007; Lifter et al., 2011).

Research also supports the need for candidates to be knowledgeable about children’s play. Play is a behavioral cusp for other important skills. For example, researchers have documented relations between play and language (Barton & Wolery, 2010; Frey & Kaiser, 2011; Lewis, 2003; Vig, 2003) and play and social skills (Freeman et al., 2015; Gulsrud et al., 2014; Kasari et al., 2012; Toth et al., 2006). Play also promotes independent participation and engagement because it provides a context for meaningful interactions with others across settings.

Many children learn to engage in increasingly complex play in quality early childhood environments (e.g., child care, home, preschool). However, research has consistently shown that some children engage in less complex and fewer play behaviors when given the same materials in the same settings

(Wilson et al., 2017). Some children will require intentional, systematic instruction to learn appropriate play skills (Barton & Wolery, 2008; Lifter, Foster- Sanda et al., 2011; Thiemann-Bourque, et al., 2012). The existing play intervention research suggests that adult modeling and prompting within a naturalistic teaching approach is effective for increasing play skills in young children (Barton & Wolery, 2008; Barton, 2015). Teaching children to play in increasingly complex ways ensures children have multiple and varied learning opportunities within playful contexts (Barton, 2015).

**Component 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.

### **6.6 Knowledge Base**

Teachers are expected to use responsive interactions, interventions, and instruction with sufficient intensity across activities, routines, and environments given the evidence supporting these strategies as effective in facilitating access, participation, and inclusion of all children.

InTASC Standards (CCSSO, 2013), particularly 1, 6, 7, and 8, promote this focus. For example, Standard 1 states that candidates should understand that each learner's particular developmental profile influences learning and use that understanding to make individualized instructional decisions. InTASC Standards 6, 7, and 8 instruct candidates to promote equitable access to rigorous learning through application of appropriate instruction and the use of multiple methods of assessment to guide the development and implementation of planning and instruction to meet the needs of all learners. The NAEYC Initial Personnel Preparation Standard 4 (2011) says that candidates know, understand, and use a wide variety of developmentally appropriate approaches and instructional strategies. Standard 5 emphasizes candidates' role in designing and implementing challenging curriculum that promotes developmental and learning outcomes for young children.

The CAEP K-6 Elementary Education Standards 1 and 4 (2018) similarly stress the importance of understanding and attending to individual children's developmental and learning needs (1.a) and guide candidates to use that understanding to plan and implement learning experiences and environments that address each individual need (1.b). Standard 4 provides further support by tasking candidates to use effective instruction to support each child's learning. Namely component 4.a instructs candidates to "use a variety of instructional practices that support the learning of every child" (p. 28). Component 4.g extends this guidance to task candidates to "effectively organize and manage individual instruction to provide targeted, focused, intensive instruction that improves or enhances each child's learning" (p. 32).

The CEC Initial Preparation Standards (CEC, 2015) Standard 1 calls for candidates to use their knowledge of how exceptionalities impact development and learning to provide meaningful and challenging learning experiences for individuals. Further, CEC Standard 2 states candidates facilitate active and effective learning by creating safe, inclusive, culturally responsive learning environments. CEC Standard 3 calls for candidates to use knowledge of general and specialized curricula to individualize learning opportunities which necessitate the application of supports of sufficient

intensity. CEC Standard 5 focuses on the use of a range of evidence-based instructional strategies to with sufficient intensity to advance learning.

The CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (CEC, 2017) states that candidates should develop and match learning experiences and instructional strategies to the developmental characteristics of young children (ECSE1.S2) and that those learning experiences should be embedded in daily routines and activities (ECSE2.S3). ECSE5.S6 extends this to emphasize that candidates should use a continuum of intervention strategies to facilitate access to the general education curriculum and daily routines. Several other Instructional Planning and Strategies knowledge and skill statements expand on the candidates' implementation of a variety of responsive supports, such as, candidate scaffolded and initiated instruction (ECSE5.S2), use of individual and group guidance and problem-solving strategies (ECSE5.S4), use of systematic instruction (ECSE5.S9), and use of adaptations as needed (ECSE5.S13).

The DEC Recommended Practices (DEC, 2014) for Instruction call for EI/ECSE professionals to "identify each child's strengths, preferences, and interests to engage the child in active learning (INS1); gather and use data to inform decisions about individualized instruction (INS3); embed instruction within and across routines, activities, and environments to provide contextually relevant learning opportunities (INS5). INS 4 specifically guides EI/ECSE professionals to "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 and INS 10 focuses on implementation of "the frequency, intensity, and duration of instruction needed to address the child's phase and pace of learning or the level of support needed by the family to achieve the child's outcomes or goals.

The CEC High Leverage Practices (McLeskey et al., 2017) also lend support and guidance to provide sufficient intensity and support for all learners. In particular, HLP 15 instructs EI/ECSE professionals to "select powerful visual, verbal, and written supports; carefully calibrate them to students' performance and understanding in relation to learning tasks; use them flexibly; evaluate their effectiveness; and gradually remove them once they are no longer needed" (p. 23). Finally, HLP 20 guides EI/ECSE professionals to "match the intensity of instruction to the intensity of the student's learning and behavioral challenges" (p. 25).

U.S. legislation provides additional guidance and justification for this component. The Individuals with Disabilities Education Act (IDEA) (2004), mandates that decisions on service delivery be based on the needs of the child and family. Additionally, IDEA (2004) includes provisions for Early Intervening Services (EIS) designed to support students who have not been identified as needing special education but who are identified as needing additional academic and/or behavioral supports with sufficient intensity so as to prevent the need for special education services, if possible.

EI/ECSE professionals recognize the importance of using and promoting a continuum of strategies that are aligned with the needs of each individual child (Sandall, Schwartz, Joseph, & Gauvreau, 2019). By doing so, they can select and apply individualized strategies to ensure children receive support of sufficient intensity across environments to facilitate access, participation, and engagement in natural and inclusive environments. A wealth of research has identified a wide range

of curricular modifications and adaptations when implemented with young children result in positive changes in learning and development (Odom, 2001; Odom, et. al., 2012; Sandall et al., 2016; Trivette et al., 2010). Research has also indicated that individualized embedded instruction is effective in teaching a variety of skills and to support meaningful participation of children with and without disabilities (Barton & Smith, 2014; Daugherty, Grisham-Brown, & Hemmeter, 2001; Grisham-Brown et al., 2000; Horn et al., 2002; Robertson et al., 2003). An element of individualization includes examination of the particular parameters (e.g., intensity, environmental context, etc.) necessary for a strategy to be sufficient in order to ensure adequate progress, access, and participation. Indeed, effective EI/ECSE professionals identify learning opportunities and supports that are matched to each child's unique strengths and needs and work with others, including families and other professionals, to provide systematic instruction that is continually adapted based on assessment data (Sandall et al., 2019). Therefore, it is vital for preparation programs to adequately prepare initial EI/ECSE professionals to not only identify a wide range of strategies, modifications, and adaptations, but also to implement them with sufficient intensity across environments to ensure they facilitate access, participation, and engagement that promotes quality, full inclusive and rigorous, equitable learning opportunities.

The field has increasingly embraced the application of multi-tiered systems of supports (MTSS) to provide a framework of services that can help early childhood professionals align assessment data with specific teaching and intervention strategies to meet the needs of individual children (NPDCI, 2012). While this approach has been described in a variety of ways, three common components make up the framework: (a) systematic assessment of children's learning and development, (b) the use of evidence-based foundational instruction and intervention, and (c) clearly defined instructional decision-making (Buysse & Peisner-Feinberg, 2013). Effective early childhood educators recognize that such systems include quality, foundational instructional practices and supports for all children, and the provision of specific, additional supports for individual children with diverse needs (NPDCI, 2012). In a critical analysis of tiered frameworks in early childhood, Snyder, McLaughlin, and Denney (2011) found that all the frameworks included an acknowledgement of the importance of making informed decisions about the type and level of support or intervention intensity and specificity in order to ensure children receive services of high quality marked by intentional and systematic instruction that is implemented with sufficient intensity to support learning. The application of such frameworks show potential to guide "program development, resource allocation, and decisions about the types, levels, and intensity of supports and interventions provided to all young children and their families" (Snyder et al., 2011, p. 270). Indeed, the progress monitoring in such frameworks helps inform teachers provide sufficient intensity of services (Yell et al. 2017). Lack of sufficient intensity of services has been identified as a serious issue in relation to barriers to inclusion and enactment of Free Appropriate Public Education (FAPE) (Batemen, 2011). Therefore, personnel preparation programs must ensure candidates are well prepared to operate in and implement such systems of support.

**Component 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.

## **6.6 Knowledge Base**

InTASC Standard 6 (CCSSO, 2013), directly addresses the importance of candidates' use of multiple sources of data "to monitor learner progress and to guide the teacher's decision making." InTASC Standard 7 highlights the importance of candidates using multiple sources of data to "adjust instruction in the moment, to modify planned scaffolds and/or to provide additional support/acceleration." The same emphasis on using multiple sources of data, including systematic observations, documentation, and other effective assessment strategies in responsible ways to plan, implement and evaluate and continually improve instruction, intervention, and interaction is seen in CAEP K-6 Elementary Standard 4 (2018) and in The NAEYC Initial Personnel Preparation Standards (2011). The CEC Initial Preparation Standards (2015) Standard 4, Assessment, states that candidates use multiple data sources and collaborate with families and other professionals to make decisions about the instructional needs of children. Further, Standard 7, Collaboration, emphasizes that candidates collaborate with families and other professionals to meet the needs of young children across a range of learning experiences and settings.

The Individuals with Disabilities Education Act (IDEA, 2014) requires that evaluations of children with disabilities use a variety of assessment tools and strategies to determine the child's strengths and needs (IDEA regulations, 2012, 34 C.F.R. 300.304(b)). Parents, the EI/ECSE professional, and other professionals involved in the education of the child must contribute to the evaluation.

The CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (CEC, 2017) includes similar expectations for candidates. The Assessment section requires candidates to collect information from multiple sources and environments (ECSE4.S6). The Instructional Planning and Strategies section includes the expectation that candidates select intervention strategies based on information from multiple disciplines (ECSE5.S8). And finally, the Collaboration section emphasizes that candidates collaborate with families and other professionals to support children's development and learning (ECSE7.S.2). DEC's Recommended Practices (DEC, 2014) expect EI/ECSE to work with families and other professionals to collect assessment data (A2). While the Environment Recommended Practices (E4 and E5) indicated that EI/ECSE professionals collaborate with families and other professionals to identify each child's needs for assistive technology and acquire or create that assistive technology. In terms of planning, the DEC Recommended Practices (DEC, 2014) state that EI/ECSE professionals along with families and professionals from multiple disciplines plan and implement supports and services for children (TC1). CEC's High Leverage Practice (HLP 1) (McLeskey et al., 2017) says that EI/ECSE professional collaborate with professionals and HLP3 includes collaboration with families to support student learning. The use of multiple sources of information to identify students' strengths and needs is addressed in HLP4.

A major goal of EI/ECSE professionals' interactions, interventions, and instruction with young children is to promote learning and development of progressively more advanced and adaptive skills (Wolery & Ledford, 2014). Collaboration has been found to positively impact child outcomes. Ronfeldt and colleagues (2015) reported that teachers participating more frequently in team activities, especially those related to assessment, produced relatively higher student achievement than teachers with less frequent team interactions. Further, when EI/ECSE professionals collaborate to set goals, children make more gains in achieving those goals, suggesting the importance of

partnerships in child outcomes (Erwin et al., 2016).

### **Standard 7: Professionalism and Ethical Practices**

**STANDARD 7:** Candidates identify and engage with the profession of early intervention and early childhood special education (EI/ECSE) by exhibiting skills in reflective practice, advocacy, and leadership while adhering to ethical and legal guidelines. Evidence-based and recommended practices are promoted and used by candidates

**Component 7.1.** Candidates engage with the profession of EI/ECSE by participating in local, regional, national, and/or international activities and professional organizations.

#### **7.1 Knowledge Base**

InTASC Standard 9 (CCSSO, 2013) includes the engagement of candidates in ongoing learning opportunities to develop knowledge and skills and in meaningful and appropriate professional learning experiences aligned with one's own practices in addition to program needs. In addition, InTASC Standard 10 (CCSSO, 2013) states that candidates engage in professional learning to contribute to the knowledge and skills of others and to collaborate to advance professional practice.

The CEC Initial Preparation Standards (2015) include Professional Learning and Practice as Standard 6. Components within this standard state that professionals understand how current issues and foundational knowledge influence practice and that candidates understand the value of lifelong learning and engaging in professional activities and learning communities. Moreover, the CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (CEC, 2017) also affirms that candidates should participate in professional organizations relevant to the field of EI/ECSE (ECSE.6.S4). NAEYC Initial Personnel Preparation Standard 6 (2011) states that candidates identify and involve themselves with the field. The CAEP Elementary Education Standards Standard 5 (2018) states that candidates should engage in lifelong learning and relevant communities of practice. The DEC Recommended Practices (2014) include a strand on leadership with three practices that discuss EI/ECSE professionals expanding their professional knowledge and skills. The first recommended practice emphasizes that leaders belong to professional associations and engage in evidence-based professional development (L4).

Busby et al. (2019) note that “[p]rofessional organizations provide avenues for professional development through collaboration and networking that ultimately affect the teaching and learning process” (p. 18). The authors go on to state that EI/ECSE professionals who participate in the events of a professional organization have the opportunity to learn from and engage with leaders in the field about current research, trends, and issues in the field. Busby et al. (2019) add that professional organizations provide opportunities for EI/ECSE professionals to engage in leadership in their field and gain access to the professional knowledge base and resources through conferences, journals and other publications, and media. Exposing candidates to professional organizations as students will help them recognize the value of membership and engagement in organizations in the field.



In the Vescio et al. (2008) review of research on the engagement of teachers in collaborative professional development through processes such as professional learning communities (PLC), the authors found that the improvement in teachers' professional practices and collaboration consequently improved student learning and outcomes. Throughout the studies they reviewed, teachers identified their level of engagement and "buy in" to professional development and their own learning because it was driven by what the teachers identified as a need. Candidates will also benefit from this approach to professional development. Additionally, teachers also more readily accessed new strategies that were grounded in scholarly literature, and they became more student centered through the PLC style of professional development.

**Component 7.2.** Candidates engage in ongoing reflective practice and access evidence-based information to improve their own practices.

### **7.2 Knowledge Base**

InTASC Standard 9 (CCSSO, 2013) includes seeking resources to support analysis, reflection, and problem solving to improve practices. Standard 9 also discusses reflecting on biases and accessing resources to deepen the candidate's understanding of cultural, ethnic, gender, and learning differences in order to build relationships, create more meaningful learning experiences, and consequently improve professional practices. Standard 9 further states that candidates understand and know how to use self-assessment and problem solving strategies to analyze and reflect on their own practices, how to use learner data to evaluate their own practices, and how to build a professional growth plan. Standard 9 goes on to state that candidates take responsibility for learner outcomes by using current policy and research as sources of analysis and reflection to improve practice. Lastly, Standard 10, Leadership and Collaboration, states that candidates should embrace the challenge of continuous improvement.

The CEC Initial Preparation Standards (2015) include Professional Learning and Practice as Standard 6. Within this standard, the significance of lifelong learning is discussed. The CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (CEC, 2017) states that candidates should use evidence-based and recommended practices in their own professional practice (ECSE.6.S5). Further, the NAEYC Initial Personnel Preparation Standards (2011) include the relationship of reflecting on one's own practice and engaging in continuous learning efforts to improve learner outcomes. Finally, the CAEP Elementary Education Standard 5 (2018) states that candidates work to continually improve practices through self-study, reflective practice, and drawing on the literature.

State, federal, and provincial policy, such as the IDEA (U.S. Department of Education, 2011), states the need for continued professional development to improve the skills and practices of educators.

The DEC Recommended Practices (2014) include one practice that outlines the need for development and implementation of evidence-based professional development in order to ensure the effective implementation of the DEC Recommended Practices (L9). Additionally, the DEC Code of Ethics (2009) states "professionals engage in ongoing and systematic reflective inquiry and self-

assessment for the purpose of continuous improvement of professional performance and services to young children with disabilities and their families” (p. 1).

Ross and Bruce (2007) propose a model for educator self-assessment. The authors note that, through self-assessment, areas for growth are identified and professionals may more easily identify varieties of resources and professional development to support professional growth. Additionally, researchers (such as Brown & Weber, 2019; Jensen & Rasmussen, 2018; Powell et al., 2013) note that professional development comes in a variety of formats, including face-to-face workshops, online technologies, coaching, and reflective supervision. Jensen and Rasmussen (2016) goes on to note that the professional development of early childhood educators directly influences the positive outcomes of children.

Many authors (for example, Davis, 2006; Freese, 2006; Garcia et al., 2006; Harland & Wondra, 2011; Welch & James, 2007) note the growing trend of reflective practice as a process for professional growth. Reflective practice allows EI/ECSE professionals to not only consider their own practices but also the practices of more seasoned and experienced professionals to continuously grow in professional practice (Arrastia et al., 2014; Ferraro, 2000; Tillema, 2000). Lastly, Schön (1983, 1987) notes that, as professionals review and reflect on their own and other pedagogical styles, they are refining their craft in order to be more effective. Reflective practice can be particularly useful in the preparation of EI/ECSE professionals as they perfect their professional practices.

**Component 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.

### **7.3 Knowledge Base**

InTASC Standard 7 (CCSSO, 2013) states that professionals should know about and be able to use evidence-based strategies. Additionally, Standard 10 states that professionals should help shape the mission of advocacy for learners and their success.

The CEC Initial Preparation Standards (2015) include Professional Learning and Practice as Standard 6. Components within this standard focus on candidates advancing the profession by engaging in activities such as advocacy and mentoring. Moreover, according to the CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (CEC, 2017), candidates must advocate for professional status and working conditions for those who serve infants and young children and their families (ECSE.K6.4), apply evidence-based and DEC recommended practices for infants and young children, including those from diverse backgrounds (ECSE.S6.5), and advocate on behalf of infants and young children and their families (ECSE.S6.6). Lastly, NAEYC Initial Personnel Preparation Standard 6 (2011) focuses on engaging in informed advocacy for young children and the early childhood profession (6e). While providing services to children with disabilities and their families, EI/ECSE professionals must make assessment and intervention information understandable to families so that parents/guardians can be informed advocates for their children

(IDEA, 2006). During service planning (e.g., Individual Education Program (IEP) and Individual Family Service Plan (IFSP) meetings), EI/ECSE professionals are asked to make decisions based on the needs of the child while keeping in mind the requirements of pertinent laws (e.g., IDEA of 2006 and others). In this way, EI/ECSE professionals must use their understanding of recommended practices and current research to advocate for appropriate items like placement, curriculum, or frequency of services for a particular child with a disability.

The DEC Recommended Practices (2014) state that EI/ECSE professionals advocate for policies and resources that promote the implementation of DEC position statements and papers as well as the DEC Recommended Practices (L5), and further develop and implement policies, structures, and practices that promote shared decision-making with practitioners and families (L3). CEC's High-Leverage Practices (McLeskey et al., 2017) state that candidates should collaborate with families to support student learning and secure needed services through advocacy (HLP3).

According to Hollingsworth et al. (2016), initial candidates have more of a decision-making voice in early childhood research and policy after taking an undergraduate course in policy and engaging in policy projects. Research also shows that candidates with intentional advocacy assignments in higher education courses saw themselves as agents of change with increased confidence and a sense of power. Ethridge et al. (2019) reported that graduates from preparation programs that support development of these necessary skills continued to engage in advocacy efforts for their children and families.

**Component 7.4.** Candidates practice within ethical and legal policies and procedures.

#### **7.4 Knowledge Base**

InTASC Standard 9 (CCSSO, 2013) states that candidates must advocate, model, and teach the safe, legal, and ethical use of information and technology and know the laws related to learners' rights and teachers' responsibilities. This standard also states that candidates must understand the expectations of the profession, including codes of ethics, professional standards of practice, and relevant law and policy. The CEC Initial Preparation Standards (2015) include Professional Learning and Practice (Standard 6). Within this standard, the use of professional ethical principles and professional practice standards in guiding practice is affirmed. The CEC/DEC Initial Specialty Set for Early Childhood Special Education/Early Intervention (CEC, 2017) states that candidates should understand the legal basis for services for young children (ECSE.6.S1), understand the legal, ethical, and policy issues related to services for young children and their families (ECSE.S6.3), and "implement family services consistent with due process safeguards" (ECSE.6.S5, p.5). Standard 6 of the NAEYC Initial Personnel Preparation Standards (2011) states that candidates should know about and uphold ethical standards and other professional guidelines. Lastly, CAEP Elementary Education Standards (2018) say that candidates use pertinent ethical standards to inform their practices.

The DEC Recommended Practices (2014) include practices in the Leadership strand that address adherence to and modeling of the DEC Code of Ethics, DEC position statements and papers, and the DEC Recommended Practices (L2), and ensuring standards, laws, and regulations are followed (L10).

The Family strand (F9) states that EI/ECSE professionals assist families in knowing and understanding their rights.

The DEC Code of Ethics (2009) states, “The early childhood special education professional should base his or her behaviors on ethical reasoning surrounding practice and professional issues as well as an empathic reflection regarding interactions with others. We are committed to beneficence acts for improving the quality of lives of young children with disabilities and their families” (p. 1). Additionally, the CEC Code of Ethics (2015) states that EI/ECSE professionals should maintain a high level of professional competence and integrity. Lastly, the NAEYC Code of Ethical Conduct and Commitment (2011) states that professionals have a responsibility to children, families, colleagues, and the community.

Balch et al. (2008) state, “As a professional, a teacher must promote the success of all students, partly by understanding and being responsive to the legal context of teaching (i.e., teachers’ and students’ rights balanced by the scales of justice). The legal context that influences teaching is invariably complex, differing in details by location. Yet, in any educational setting, a teacher’s success is increasingly dependent on a sound awareness and prudent application of education law (p. 5)”. The authors go on to note: “The quality of our education system is dependent on teacher efforts to promote the success of all students, partly by understanding and being responsive to the legal context of education. For this reason, an EI/ECSE professional’s success requires a sound awareness and prudent application of education law.

Pedagogy informed by law is essential because broad legal latitude is afforded the EI/ECSE professional, with many legal privileges being inferred and inherent rather than promulgated” (p. 8).

Additionally, Barrett et al. (2012) discuss the value of adhering to the law and valuing a code of conduct. While this research was conducted with school-based professionals, the implications and considerations of issues such as “boundaries” apply to the variety of early childhood learning environments as well as working with children and families. Moreover, Able, West, and Lim (2017) note that following professional codes of ethics provides a decision-making framework for evidence-based practices.

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