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## Universal Design for Early Childhood Education: Ensuring Access and Equity for All

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This article introduces the framework of Universal Design for Early Childhood Education (UDECE). The goal of the framework is to synthesize best practices within the field of early childhood education and special education, providing a template to support access and equity for all children. The UDECE framework includes examination of issues of access, the provision of high quality educational practices, and issues of accountability for success and equity. By placing the needs of all children at the core, UDECE extends philosophies embracing full inclusion into pathways through which this goal can be supported.

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The fields of early childhood education and special education have long been concerned with issues of access and equity for children with special needs. Federal mandates which require that children with special needs are provided services within natural environments and that children are fully included in the least restrictive environment make early childhood education programs an increasingly viable and welcome setting for young children with special needs, based on the tenet that all children belong in all environmental settings. How to best include children with varying developmental needs is a primary concern of teachers, parents, and theoreticians within both academic disciplines.

Inclusion and natural environments are not places, but rather represent a philosophy that guides practitioners as they work to support equity for all children. One of the movements within the field of early intervention and special education has been support for “people-first” language: children are not

defined by their disability, but rather, their disability represents a characteristic, one mere facet of who they are and how they interact with the world. However, existing structures between the field of early childhood education and special education often define children by their disability, and therefore serve to contradict messages centered on the premise that children are, in fact, children first.

The academic movement to merge the fields of special education and early childhood education has occurred in response to issues of equity and inclusion as well as federal legislation, but a framework to support this merger is lacking. From both fields information is provided with regard to teaching practices, curriculum, and environmental design, but without an organizing framework, these efforts become piecemeal and isolated.

Consider training programs for early childhood professionals. Textbooks within the field of early childhood education often include the topic of children with special needs as an addendum. The typical approach is to provide a chapter on special needs, or separate sections embedded within texts that address issues related to inclusion. Based on this, students are trained in a framework that supports a separate but equal mentality, as opposed to a mindset which emphasizes that all children have unique needs, and it

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is the responsibility of each professional to make sure that the range of unique and individual needs children bring to early childhood environments are met and enhanced. Inclusion is a philosophy that results in a series of efforts, applications and assessments, and for full inclusion to be supported, it is essential that both fields adopt a framework and educational materials that do not separate the needs of children with and without special needs.

Universal Design for Early Childhood Education (UDECE) provides an organizing framework for synthesizing the fields of early childhood and special education. Adapted from the architectural framework of Universal Design and the special education framework of Universal Design for Learning, UDECE embraces an ecological approach to supporting high quality early childhood education for all children.

### **THEORETICAL RATIONALE FOR UDECE: ECOLOGICAL SYSTEMS THEORY**

At the core of UDECE are the concepts of inclusion and flexibility. Urie Bronfenbrenner's Ecological Systems Theory (1979) provides a theoretical rationale for UDECE through its focus on a child's changing biology and the impact of social and cultural contexts on this changing biology. For example, the child as a toddler interacts very differently with the world than the same child as a teenager. Conversely, the world treats the child differently, and relationships with family, peers, and teachers change dramatically at each developmental stage. The fact that the child and context both impact each other means that these influences are bidirectional.

Bronfenbrenner's theory provides information about the constantly changing context and the complexity involved in the individual nature of each part. Based on Bronfenbrenner's work, UDECE includes the following foundational components:

1. Children, families, and professionals have diverse needs and goals. Each early childhood professional, child, and family brings to the early childhood environment a variety of needs, preferences, strengths, and ways of viewing and interacting with the world. Further, each individual professional, family, and community have diverse needs and goals regarding the care and education of young children;
2. Classroom communities have diverse needs and goals. Each classroom community is as unique as the children who inhabit it, and therefore presents diverse needs, challenges, and strengths;
3. The field of early childhood education has diverse needs and goals. The uniqueness that children, families, and

professionals bring to early childhood education creates the need for a field that is flexible and diverse in both its offerings as well as its professional opportunities.

4. Community, society, and culture have diverse needs and goals. The social and cultural context that early childhood education occurs within is shaped by politics, economics, expectations, and standards for the education of children.

Each of these components relate to the inclusion of all children within early childhood environments through recognizing the diverse needs of children, families, professionals, and classroom communities, as well as the dynamic influences of society and culture—manifested through politics, economics, expectations, and standards for the education of children. Further, UDECE addressed limitations raised by Bergen (2003) regarding the present context of professional education practices for the inclusion of children with disabilities. These limitations include the segregation of the fields of early childhood and special education, which is addressed by UDECE through the provision of a template that supports the diversity of children's needs and abilities within its foundation, thereby establishing a common ground from which shared understanding and expertise, teaching and curricular practices, and full inclusion can occur.

### **UNIVERSAL DESIGN FOR EARLY CHILDHOOD EDUCATION: ESTABLISHING THE FOUNDATION OF INCLUSION**

In 2006 the article *The Universal Design of Early Education: Moving Forward for All Children* (Conn-Powers, Cross, Traub, & Hutter-Pishgahi, 2006, p. 6) applied the principles of Universal Design and Universal Design for Learning to the field of early childhood education. The goal of applying these frameworks includes the "design of early education programs that meet the needs of all learners within a common setting and begin to move away from specialized programs." This goal, according to the authors, needs to be accomplished with a concurrent focus on standards and program accountability.

One of the main goals of the Conn-Powers framework is equitable access, and the central premise is the creation of early education programs that engage and support all children. Building on and extending from the work of Conn-Powers et al. (2006) is the framework for Universal Design for Early Childhood Education. While UDECE shares the learning goals of the Conn-Powers et al. model for children and families within the early childhood classroom, it extends this work through also focusing

on access and equity for children, families, and professionals. The framework of UDECE looks specifically at what access to the field means for children, families, and professionals and how quality practices within the overall field can promote accountability for equity and success for each of these groups. For the purposes of this article and the exploration of how UDECE synthesizes practices within the field of early childhood education and special education to provide a framework for the inclusion of all children, only issues related to children will be explored. The five components of UDECE as they relate to children include (Figure 1):

1. Children need *multiple means of access* to high quality early childhood care and education.

This principle focuses on the need for children to have varied opportunities to access high quality care and education in environments that respect and welcome them and meet their individual needs. The core of access is high-quality educational experiences for all. Within the model of UDECE, multiple means of representation, engagement, and expression ensure that access is supported.

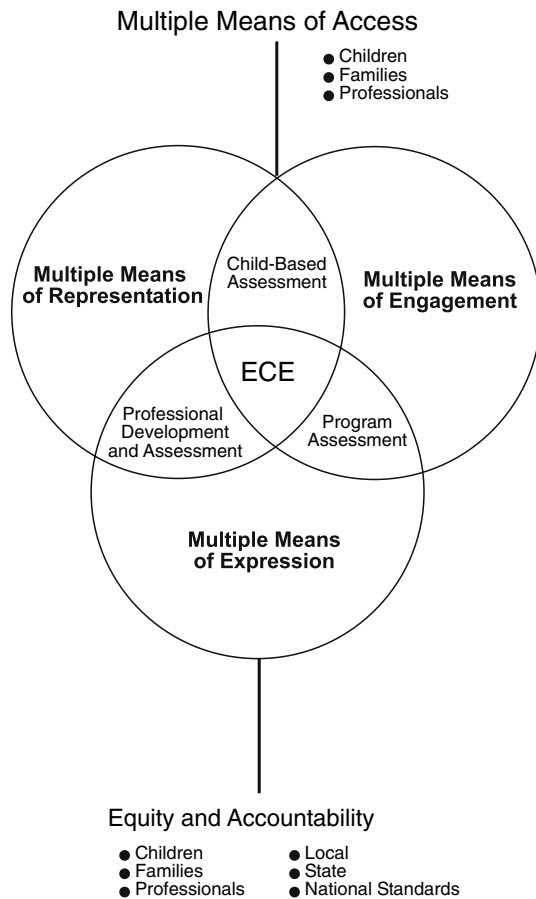


Fig. 1. The framework of UDECE

2. The field of ECE needs to provide *multiple means of representation*.

Multiple means of representation argues that learners require many different methods of acquiring information and knowledge. Within the field of special education, this means materials and programs provide students with varied ways to explore and process information, including vision, hearing, or the sense of touch. In early childhood education, multiple means of representation refer to the numerous programs, philosophies, and educational approaches in the field, which result in a broad array of programmatic structures and appropriate practices for children to grow and develop within.

Consider the needs of three different children: Cassie, age 8 months and diagnosed with Down Syndrome; Meg, age two and the daughter of a single-parent; and Alex, age four and from an impoverished background. Each child is at a different stage of development, and each has different needs regarding care and education. Multiple means of representation offers options—an infant toddler program for Cassie that welcomes all children including those who have special needs; a child care center that offers family support as well as a developmentally appropriate environment for Meg; and a Head Start program for Alex. Multiple means of representation supplies the breadth of the field—a program exists to meet every child’s need.

3. Children need *multiple means of engagement*.

Multiple means of engagement within the field of special education supports learner’s interests, and provides adequate motivation and challenge for learning. UDECE focuses on the creation of appropriate environments and curricula that encourage children’s overall development and support the developmental needs of the classroom community as a whole.

Again, consider the needs of Cassie, Meg, and Alex. Cassie loves to explore the world through her senses, and an environment that engages her is one in which she can pursue her bodily explorations. To Cassie, the world is a bounty of sights, sounds, smells, and things to touch, and an engaging environment means these opportunities are provided in an atmosphere that is safe and secure. Engagement for Cassie also means that her teacher, Marian, has knowledge of how to meet Cassie’s individual needs. Because of her Down Syndrome, Cassie’s muscle tone is low, and she needs additional support to attain the developmental milestones of rolling over and sitting up. Cassie loves to sit at the table at snack, and because Marian knows that supplying pillows will help support Cassie as she sits, Cassie is an avid, equal participant in snack and all other table activities. Her sister, Meg, steams through life full speed ahead—she wants to do it all, experience everything, and leave no stone (or occasionally a table) unturned. She, like many other two-year-olds, is ready not only to experience the world, but to explore her own relationship to it. What this means to Meg is experiment, experiment, experiment. In Meg’s classroom, engagement means action, and the environment both supports and extends this drive for knowledge of the world. Alex has grown from a child who is quite adept at expressing himself verbally, to a preschooler who is ready to explore other means of communication. He is beginning to master letters and phonetics, and is ready to explore all the written word has to offer. For Alex, literacy is a main goal, and rich classroom opportunities for engagement with the written word serve to support this drive.

Engagement pertains not only to each of these children and their development, but to the needs of the classroom community. In Cassie's environment a child is learning to roll over and another happily cruises along the classroom furniture, clutching his hands to whatever he can get a hold of for extra support. In Meg's classroom, great variance exists in the children's social skills. Some children spend hours in the sandbox and are beginning to interact in complicated play scenarios with each other, while other children enter groups by hitting, biting, or verbally asserting their presence. Children in Alex's classroom are at vastly different stages in their literacy development, with some learning basic letter identification and a few moving from scribbles to early letter formation. For a curriculum and classroom environment to be effective, it must support this wide diversity in children's needs.

4. Children need *multiple means of expression*.

Within the field of special education, multiple means of expression means that learners have various opportunities to demonstrate what they know. UDECE's focus becomes assessment and documentation practices that support the demonstration of changes in children's development and learning over time.

What do Cassie, Meg, and Alex need? It is the responsibility of the professional to determine and develop each child's individual and ever-changing needs. Multiple means of expression provide opportunities to observe and assess need—how is Cassie mastering sitting up? What additional supports can be provided? How is Meg developing socially, and what supports can be offered for her developing skills? What needs does Alex have with regard to his processing of the world around him, and what practices can the teacher employ to support this development? For each child needs for expression are unique, and therefore, varied assessment strategies support acquiring knowledge of individual needs.

5. Experiences that support *accountability for equity and success* are necessary in the field of early childhood education.

Equity means success within the context of larger societal goals, and experiences that support equity, therefore, are accountable to the larger society. Social equity in UDECE is provided through both equitable access to the field and experiences within the field that support success in the larger society. Success means that the field of early childhood education must meet the needs of children, as well as meet state and national goals for children's development and learning.

Equity for Cassie means inclusion—her days are filled in a classroom with peers, and her disability does not exclude her from opportunities to grow and develop in a natural environment that meets her individual needs. For Meg, equity means she has access to a quality education that is affordable and accessible to her mother, and welcomes her mom as an equal partner in Meg's education. For Alex, equity means that that his Head Start classroom prepares him to enter school ready to learn. Alex is considered "at-risk" for learning and development issues because of his family's poverty status, and the supports he is given on a day-to-day basis mean he will enter kindergarten with the skills needed for success in school.

Accountability is an ever-present factor within the field, and for the teachers and directors of Cassie, Meg, and Alex's early education programs, accountability means the constant

requirement of demonstrating the effectiveness of their work to other parties. Accountability means that standards for education are adhered to and responded to, and that local, state, and national goals for the education of young children provide a template for best practices in the field.

Of course, accountability does not mean that only external standards are adhered to, nor does equity mean that there is a bar to which all children and professionals must ascribe to reach. At the most basic level, equity and accountability is human respect—respect for children, respect for parents, respect for professionals, respect for ourselves, and respect for each person's uniqueness. Modeling this respect, making sure we are accountable to ourselves, and striving to treat all persons in ways that support equity is a core value of UDECE.

## MOVING TOWARD APPLICATION OF UNIVERSAL DESIGN FOR EARLY CHILDHOOD EDUCATION

UDECE is informed by several important factors, including recognition that children bring their own unique needs to the environment. In addition, the community and sociocultural context present societal goals, public policy, politics, and economics that dramatically influence goals for children, as well as how these goals are implemented and assessed. The goal of providing children with special needs services in natural environments and supporting full inclusion are examples of sociocultural goals. The field of early childhood education, therefore, faces external pressures and challenges in addition to its everyday trials in meeting the needs of its various members.

Each individual component of UDECE represents a small part of a much larger design. Unlike a puzzle, these pieces don't fit together perfectly, revealing one large, picturesque truth. Instead, the pieces complement one another, with each component remaining an individual part of the design; if any piece were removed, the design would change. It is in this way the field of ECE, and all its varied players and points of influence, can be thought of as a mosaic—individual, multicolor units representing many realities and many combinations representing multiple realities. The systems theory framework of UDECE supports understanding the influence and interaction between each individual component.

What does the framework of UDECE provide the fields of early childhood education and special education? The facet of the UDECE model explored in this article relates to children, and starting with and building from the needs of children provides a common ground for these fields to move forward together. How can access to services be supported for all children? What practices within the field

(represented through representation, engagement, and expression) can support the diverse developmental needs of all children? How can equity and accountability be embraced as outcomes, and applied to each child?

The needs of children do not exist in isolation. For the learning and development of all children to be supported, careful attention must be paid to the needs of individual families as well as the needs of professionals working with young children. UDECE's framework also provides a template for families and professionals, and the concepts of inclusion and flexibility can be equally applied to these parties.

Support for inclusion translates into a fundamental acceptance of equity, embracing that all persons are created equal, and fairness in opportunities and treatment is a fundamental societal principle. Equity for children with disabilities starts with recognizing the "all" in inclusion, and developing educational practices that embrace and define the vast range of development and learning needs at the

outset. For inclusion to be supported, children with special needs must be included within the training models adopted within the field, not relegated to segments of atypical development or addendums that serve to define children by their disability. The framework of UDECE provides a template for this synthesis, and supports cultural mandates for full inclusion.

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