A Collaborative Approach to Designing a Unified Competency Framework for Early Childhood Educator Preparation and Workforce Equity in Nebraska

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Addressing workforce shortages among early childhood professionals is a nationwide dilemma, impacting access to quality, affordable care, and education for young children. Recognizing that inaccessible and inequitable credentialing pathways exacerbated this shortage, a statewide coalition of institutions formed the Responsive Equitable System for Preparing Early Childhood Teachers (RESPECT) across Nebraska project to enhance flexibility and accessibility across teacher preparation programs. Leveraging competency-based education tenets as the foundation of quality teacher preparation programs, the first aim of this project was to develop a shared competency-based framework defining common expectations for educator preparation, credentialing, and licensing across early childhood settings. This paper describes the procedures and processes utilized to collaboratively design a common competency framework as a foundational step toward competency-based programming to support the project's broader goals of facilitating transferability of credits, credit for prior learning, and student and career advancement, with strategic emphasis on enhancing cultural sustainability and supporting diverse racial and ethnic representation among workforce professionals. Multiple competency frameworks were identified and then synthesized using qualitative document analysis methods for a final set of competencies, informed by input and feedback from professionals, institutions of higher education, community members, and field experts. Recommendations for future initiatives are included.

Keywords: competency-based education, team science, educator preparation, early childhood

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Early childhood educators play a fundamental role in the lives of developing children, their families, and their communities. The skills and knowledge these educators bring to the profession directly impact developmental opportunities and outcomes that young children experience in care centers, family childcare homes, and preschool settings. Despite variations in setting locations, communities served, and diversity across populations, commonly defined competencies (i.e., skills, knowledge, dispositions) are known to support quality experiences for young children (e.g., Burchinal et al., 2002; Cepic et al., 2015; Epstein, 2007; Jennings, 2007; Pianta et al., 2005). In recent decades, early childhood institutions and governing organizations have delineated competencies for early childhood educators to guide teacher preparation programming (e.g., Council for Exceptional Children and The Division for Early Childhood [CEC-DEC], 2020; National Association for the Education of Young Children [NAEYC], 2019). However, while such frameworks are intended to ensure quality teacher preparation, the varied use of competency frameworks may also pose barriers for professional and educational development when competency standards vary across organizations, when coursework fails to transfer across institutions, and when prior learning and experience are not acknowledged in conjunction with competency frameworks (National Research Council [NRC], 2015). Furthermore, when competency standards are overly exhaustive and specific, they may inadvertently restrict cultural variation in practice, impacting the experiences of both educators and children.

Currently, workforce shortages across the nation have prompted a reexamination of early childhood teacher preparation pathways, spurring a reevaluation of how competencies are identified, assessed, and utilized for coursework design and certification (e.g., Center for the Study of Child Care Employment et al., 2020; NRC, 2015; Power to the Profession National Task Force, 2020). The Responsive Equitable System for Preparing Early Childhood Teachers (RESPECT) across Nebraska project was initiated as a statewide collaborative effort to address high-quality early care and education needs across the state—to bolster the early childhood workforce in Nebraska through accessible, equitable, and responsive pathways. The project's strategic aim was to reevaluate competency standards to develop a comprehensive framework and assessment process, a foundational step for improving early childhood teacher education through competency-based programming. A common competency framework recognized across the state would: (1) enable early childhood professionals to meet educator certification requirements more effectively, (2) facilitate course transfers across institutions of higher education (IHEs) to streamline program completion, and (3) expand opportunities to acquire credit for prior learning and experience. Existing competency frameworks (e.g., NAEYC, 2019) informed this collaborative statewide effort to meet local needs and design community-informed pathways while retaining accountability for early care and education across state organizations.

The paper aimed to provide an overview of the procedures and processes used to integrate multiple early childhood competency frameworks into a single, comprehensive framework through a collaborative, multi-institution effort to facilitate competency-based programming for early childhood educators. We review how competency-based frameworks are used by credentialing organizations and IHEs, with specific regard to early childhood workforce members and teacher preparation processes. We also provide a landscape overview of the needs and opportunities in Nebraska within the context of competency-based programming to support workforce members and teacher training pathways, followed by a broad description of the RESPECT across Nebraska project and its aim to design a common competency framework. The bulk of this paper details the execution of this project, describing the stages and methods involved in this collaborative work over one year. Finally, the work's outcomes, challenges, and limitations are identified, along with recommendations for future initiatives. Aligned with the characteristics of successful team science (Bennett & Gadlin, 2012), this paper illustrates how IHEs, communities, state departments, and professional organizations might collaboratively improve educator preparation programs through the systems' integration of common competency-based standards.

Literature Review

Competency-Based Education in Teacher Preparation

Competency-based education (CBE) is a learner-centered educational experience based on mastery of competencies rather than hours spent in a course (Burnette, 2016; Mason et al., 2020). The U.S. Department of Education defines CBE as an instructional approach in higher education that structures course content or delivery methods around competencies—what students know and can do—rather than adhering to traditional instructional methods (Oroszi, 2020; U.S. Department of Education, 2014). Although different definitions of CBE exist, they all share common components: curriculum designs are centered around specific competencies, progress in learning is assessed by demonstration of the competencies, and courses or programs have flexible pacing, meaning the time it takes to master a competency can vary (Mason et al., 2020). From a CBE standpoint, learning should be both cumulative and progressive, expanding on existing knowledge and skills to foster the growth of a competent individual (Gervais, 2016). Therefore, competencies can be understood as successful behaviors or realized abilities in real-life situations (Gervais, 2016; McClelland, 1973), reflecting what is required from the learner in life and on the job. In other words, competencies specify what a learner should know and be able to do and the dispositions needed to apply key knowledge and skills. Competencies are more specific, applied, and defined than standards, and thus may be more directly tied to workplace applications.

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The concept of CBE dates back to a movement in the United States in the 1960s–1970s, stemming from curriculum theory and practice developments in vocational education and teacher training programs (Nodine, 2016; Schilling & Koetting, 2010; Soare, 2015). Today, an increasing proportion of students pursuing higher education degrees are nontraditional students—i.e., working at least part-time (31%), diverse in age (34% are older than 25), culturally and racially diverse (43% are non-White or multiracial), have less experience with college (55% are first-generation), and are balancing family responsibilities (25% are parents; Today's Students Coalition, 2024).

Consequently, CBE models are gaining renewed attention in response to the need for innovative approaches to support workforce readiness and address significant challenges of IHEs, such as providing accessible, affordable, and equitable programs, facilitating degree completion, and ensuring quality (Klein-Collins & Shafenberg, 2023; Mason et al., 2020). Unlike traditional programs, which are mostly campus-based, instructor-centered, and lecture-oriented with assessments based on assignment and exam grades, CBE programs are more student-centered and flexible in terms of duration and modes of delivery, while holding learners accountable through demonstration of relevant competencies required by their field (Stewart et al., 1976). CBE programs also consider students' prior learning, that is, knowledge and skills gained outside a traditional academic setting, such as from work experience, training programs, independent study, or noncredit courses (Klein-Collins, 2011). Although the effectiveness of CBE programs has not yet been widely studied, available evidence is promising.

A study of six institutions offering CBE programs demonstrated increased student success, particularly among adult students and those with prior college credits. On average, students in CBE programs progressed at a similar or faster pace than those in traditional programs with comparable or higher completion rates (Parsons et al., 2016).

Competency-Based Frameworks

Teacher preparation programs, including early childhood education, have increasingly shifted toward assessing teacher candidates on demonstrated competencies as a more effective and valid measure of readiness and skills (Adams & Wolf, 2008). In the 1990s, the Council for Accreditation of Educator Preparation (CAEP) called on its associations, including NAEYC and CEC-DEC, to revise standards to be competency-based. By 2000, these competency-based standards became the foundation for designing, delivering, and evaluating early childhood teacher education programs (Adams & Wolf, 2008). In 2017, the Power to the Profession Task Force launched a comprehensive review of existing standards and competencies to develop a unified set of standards that would apply across states, settings, and degree levels for professionals working in early childhood. They subsequently recommended using the 2010 NAEYC Standards for Initial and Advanced Early Childhood Professional Preparation Programs as a key reference for preparation programs (NAEYC, 2019; Power to the Profession National Task Force, 2020).

Despite efforts to promote national competency frameworks, their use remains voluntary, and states determine their own requirements for teaching competencies, often with little to no connection to national frameworks (National Professional Development Center on Inclusion, 2011; Stayton et al., 2012). While this highlights areas for improvement, it also emphasizes that state-specific priorities, needs, and resources often require tailored solutions. With this in mind, the RESPECT Competency Framework aimed to establish a common language for communication (Klein-Collins, 2013) across IHEs and accrediting bodies to enhance clarity and transparency in teacher education and certification pathways for early childhood educators in Nebraska. This approach aimed to facilitate greater alignment and consistency in applying competencies while ensuring that national frameworks are effectively integrated into state-level practices.

Designing a high-quality competency-based education program requires defining and developing clear, measurable, meaningful, and integrated competencies that are aligned with a cohesive program and curriculum design and supported by a credential-level assessment strategy with effective implementation (Competency-Based Education Network [C-BEN] Assessment Collaboratory, 2021). This paper delineates the process of developing an integrated competency-based framework through a collaborative, multi-institution effort, designed to undergird CBE programs that support early childhood professional development in Nebraska.

Early Childhood Workforce Challenges

Early childhood educators provide families of young children with critical support, contributing to the vitality of local communities. However, early childhood workforce shortages across the country remain an ever-present challenge (Early Care and Education Consortium, 2022; Kraft & Lyon, 2024), limiting access to quality care for families. These shortages are exacerbated when preparation pathways are cumbersome to navigate and when education experiences are poorly matched to students' experiences. For instance, certification and credentialing serve as a gateway to teaching professions but are delineated by competencies and standards that vary across states and institutions. Students who are interested in a teaching profession must acquire acceptance into a program, fulfill all program requirements, and master certification requirements—a multiyear process presenting many potential barriers, particularly for nontraditional students or students of color (Bradley et al., 2021; Early Educator Investment Collaborative, 2023). Furthermore, early childhood educators work in a variety of settings where accreditation standards vary, primarily due to quality standards, requirements, and credentialing expectations set forth by the funding streams that support these organizations and institutions (NRC, 2015). While these variations and inconsistencies are a natural result of differentiation across the field, they can prove burdensome for early childhood professionals who navigate multiple preparation programs and employment along career trajectories (Early Educator Investment Collaborative, 2023; NRC, 2015).

One of the challenges imposed by these variations and inconsistent standards is the lack of articulation, or difficulty in transferring credits across IHEs. The state of Nebraska has a course equivalency database (i.e., Transfer Nebraska, https://transfer. nebraska.edu) enabling transferability of courses and course credits earned in prior institutions, including community colleges. Although not all institutions in Nebraska guarantee transfer of an associate degree, the completion of 30 credit hours in community colleges fulfills most general education requirements at a state college and university (see also Education Commission of the States, 2022) with up to 60 transferable credit hours. While statewide courses allow students to complete a set of early childhood courses at any of the eight community colleges in the state (http://neb-cc.statewidecourses.org/home.html), some of these courses are not easily transferred to 4-year colleges' teacher education programs, which can significantly delay degree completion for transfer students. This obstacle is partly the result of (1) the scope and the sequence of some courses are structured differently between 2-year and 4-year institutions; (2) professional competencies addressed in professional courses are not well aligned or intentionally planned across institutions; and (3) professional courses are less likely to be transferred from 2-year colleges than pre-professional courses.

While such challenges impose constraints on the workforce in general, education discrepancies experienced by non-White students may pose challenges in performing competitively in prerequisites for teacher preparation programs (Ahmad & Boser, 2014; Santos & Haycock, 2016) and completing four-year degrees at IHEs (National Center for Education Statistics, 2016). While affordability and college-readiness disproportionately affect completion rates among college students of color, program completion is further exacerbated by complexities embedded in credentialing requirements, especially when completing program requirements conflicts with work availability and pay (e.g., student teaching; Bradley et al., 2021; Goodwin, 2023; Kawasaki, 2023; Santos & Haycock, 2016). Teachers of color are crucial for positive student outcomes (Carver-Thomas, 2018; Ingersoll & May, 2011; Redding, 2019), and educators from diverse backgrounds bring valuable caregiving skills and funds of knowledge to the field (Esteban-Guitart & Moll, 2014; Karabon, 2021). Successful programs that enable educators from diverse backgrounds to complete degrees and certification (1) recruit teachers within diverse communities, (2) develop culturally sustaining educational pathways, (3) ensure culturally and linguistically appropriate competencies, (4) connect coursework to work experience, (5) facilitate student teaching in places of employment with instructional and navigational supports, and (6) offer financial support (Zinsser et al., 2019).

Leveraging Statewide Assets to Redesign Credentialing Pathways

Early childhood settings in Nebraska have reflected national trends, where workforce shortages pose current and forecasted challenges for meeting the needs of local families and providing accessible, quality solutions for early childhood care and education (Kraft & Lyon, 2024; Melhorn, 2024). For instance, in Nebraska, 11 of 93 counties have no licensed childcare, and 84% of counties lack sufficient childcare slots to meet family needs, with many administrators unable to find qualified early education staff (Sarver et al., 2020).

Synthesizing competency frameworks is one area where states can address workforce needs, undergird quality, and ensure consistent preparation among workforce professionals (NRC, 2015). For instance, the state of Nebraska boasts strong early childhood organizations initiated by both government agencies and community coalitions that similarly advocate for quality early childhood experiences, providing support for families and workforce professionals (e.g., Buffet Early Childhood Institute, https://buffettinstitute.nebraska.edu; First Five Nebraska, https://www. firstfivenebraska.org; Nebraska Association for the Education of Young Children, https://www.nebraskaaeyc.org). Despite variability in the mission's scope across organizations, shared commitment to promoting the success of early childhood educators across accessible, equitable, and culturally sustaining pathways brings differentiated organizations together under the umbrella goal of strengthening the state's early childhood workforce and the quality of early childhood experiences. Thus, leveraging local strengths and assets to define a common set of standards would facilitate education and career pathways for workforce professionals. A strengths- and assets-based framework (Beck et al., 2022; Lightfoot et al., 2014), the RESPECT across Nebraska project was initiated to synthesize and coordinate local strengths and assets to design a comprehensive competency framework for early childhood educator preparation programs.

This paper reviews a collaborative statewide endeavor using a team science approach (Bennett & Gadlin, 2012) to design a competency-based framework for early childhood educators to:

- 1. Facilitate alignment of curriculum across institutions of higher education to aid transferability of coursework toward a degree in early child-hood education;
- 2. Align competencies defining what early childhood educators should know and be able to do with certification requirements to facilitate degree and teacher certification pathways; and
- 3. Align assessments with this new set of competencies so that early child-hood professionals can demonstrate competencies and earn credit for prior experience.

Overview of the RESPECT Project

The RESPECT across Nebraska project is a statewide effort involving institutions, communities, and individuals dedicated to strengthening the state's early childhood workforce. The project's central goal was to facilitate educator pathways, a critical factor for increasing access to quality early care, especially for rural or marginalized communities. To achieve this goal, the project's primary focus was to co-construct multiple pathways into higher education for early childcare professionals, facilitating inclusive and flexible degree completion and certification processes, particularly for professionals with diverse life experiences and nontraditional career paths. To accomplish this, the RESPECT project prioritized the development of a competency framework featuring inclusive, culturally sustaining competencies that

would allow institutions and childcare professionals to demonstrate knowledge and skills via innovative pathways.

The RESPECT Competency Framework Workgroup

The RESPECT competency workgroup was organized to design a comprehensive framework for early childhood teacher preparation and credentialing in the state of Nebraska.

Workgroup Members

Workgroup members were specifically selected to represent the entities that would use the competencies and to ensure community voice in their development. A total of 21 members served on the committee for two years. It represented the following constituents: (a) four-year, two-year, and tribal IHEs, (b) Nebraska Department of Education (NDE) and regional early learning specialists (c) Buffett Early Childhood Institute, (d) Nebraska Association for the Education of Young Children, and (e) early childhood educators in the field. Members resided in all parts of the state, both rural and urban communities, and represented multiple cultural and linguistic backgrounds and experiences. Although the workgroup did the primary foundational work, regular input was gathered from other workgroups that were part of the RE-SPECT project and the RESPECT Project Advisory Board.

Workgroup Objectives, Tasks, and Procedures for Execution

To achieve the overarching aim of this project, the workgroup first clarified the project's objectives (stated above) and how the intended purposes and applications for a new comprehensive competency framework fit within the broader RESPECT project. To achieve these objectives, three key tasks were identified:

- 1. Cohesively integrate multiple frameworks into one single comprehensive framework approved by the NDE.
- 2. Reevaluate and revise competency-based standards for early childhood credentialing to work within an assessment-based system to support credit for prior learning.
- 3. Integrate culturally-sustaining and trauma-informed practices with intentionality to address under-represented areas in prior frameworks.

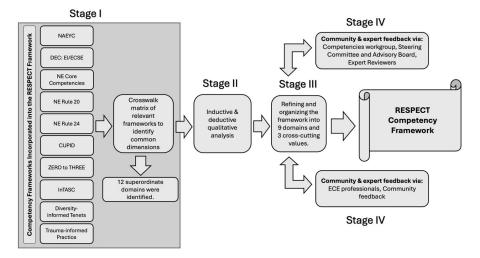
To ensure a comprehensive approach, the workgroup identified all early child-hood competency frameworks currently in use and relevant to organizations and institutions across the state, synthesized them using systematic processes, and then acquired feedback to refine for brevity and clarity. These processes and procedures are described in detail below.PPP-

Procedures and Processes

This project was carried out across four stages: (a) identification and initial analysis of early childhood competency frameworks relevant to organizations and institutions in Nebraska, (b) synthesis of the frameworks using qualitative research methods, (c) organizing data into a comprehensive framework through systematic

processes, and (d) refining the framework using feedback from early childhood professionals, leaders, experts, state officials, and community members. See Figure 1 for a visual diagram of procedures and processes.

Figure 1
Procedures and Processes for Developing the RESPECT Competency Framework



Stage One: Building a Matrix of Relevant Frameworks

Identifying Relevant Frameworks

In the project's first stage, the workgroup identified relevant frameworks for early childhood settings in Nebraska. For instance, the NDE has delineated early childhood competencies for education preparation program regulations, along with sets of competencies that certified teachers must demonstrate, and institutions of higher education are required to include the competencies identified by their accrediting bodies (e.g., CAEP). Additional frameworks were identified and incorporated based on use and pertinence for early childhood settings across the state. Frameworks were organized in a shared matrix in Google Sheets to ensure accessibility for all workgroup members.

This matrix provided a frame of reference to ascertain building blocks for a new framework and areas under-represented within the context of quality early childhood care and education. During this initial stage of analysis, workgroup members explored and identified essential components across a variety of existing frameworks. Here, areas of overlap, critical domains for inclusion, and any missing or under-addressed areas or sets of competencies, such as diversity tenets and trauma-informed practice, were identified. This process was informative in recognizing differing perspectives on how competencies were defined, structured, and scoped, clarifying

an urgent need for a framework that balances brevity with specificity. This process became a shared goal and guiding criterion for the workgroup. Ten different sets of competencies were incorporated. See Table 1 for a list of included frameworks, their source, and rationale for inclusion.

 Table 1

 Competency Frameworks Incorporated into the RESPECT Framework

Framework	Rationale for inclusion			
NAEYC Professional Standards and Competencies for Early Child- hood Educators (NAEYC, 2019).	Establishes the foundational standards and competencies for the early childhood (EC) education profession, serving as a widely adopted, unifying guideline; utilized as the core structure for developing the final framework.			
The Early Interventionist/Early Childhood Special Educator (EI/ ECSE) Standards (Division for Early Childhood of the Council for Exceptional Children [DEC-CEC], 2020)	Designed to prepare professionals who work with young children (birth to 8) who have or are at-risk for developmental delays and disabilities; included to ensure the inclusion of the competencies relevant to educators working with young children with special needs.			
Nebraska Core Competencies for Early Childhood Professionals (Nebraska Department of Educa- tion, 2019)	Serves as a guide focused on core competencies for EC professionals in Nebraska; utilized to ensure alignment with the competency-based resources widely used across the state.			
Nebraska Rule 20 (2008)	Rules and regulations for the approval of educator preparation programs; incorporated to ensure alignment with certification requirements.			
Nebraska Rule 24 (2020)	Governs the regulations for teacher certification and endorsements; utilized to ensure alignment with certification requirements.			

Framework	Rationale for inclusion		
CUPID ^a Competencies for Educators of Infants and Toddlers (Vallotton et al., 2019)	Competencies developed by CUPID that professionals in infant/toddler care and education should demonstrate; utilized to ensure the resulting framework addresses the competencies needed by educators of infants/toddlers.		
ZERO to THREE Critical Competencies for Infant-Toddler Educators TM (Dean et al., 2016, 2019)	Focuses on the educator-child interaction knowledge and skills that support optimal infant/toddler social-emotional, cognitive, language, and literacy development; utilized to ensure the integration of competencies needed to support the high-quality care and education for infants/toddlers.		
InTASC ^b Model Core Teaching Standards and Learning Progression for Teachers 1.0 (Council of Chief State School Officers, 2013)	Outlines the core competencies for all educators working with children in PK-12 classrooms; included to ensure that higher education institutions maintain accreditation.		
Diversity-informed Tenets for Working with Infants, Children, and Families (Irving Harris Foun- dation Professional Development Network Tenets Working Group, 2018)	A set of strategies and tools for strengthening the commitment and capacity of professionals, organizations, and systems that serve children and families to embed diversity, inclusion, and equity principles into their work; utilized to ensure inclusivity of the frameworks regarding these essential principles for working with young children and their families.		
Trauma Informed and Developmentally Sensitive Services for Children: Core Competencies for Effective Practice (The Multiplying Connections Initiative, 2008)	Outlines a framework of competencies essential for providing trauma-informed and developmentally appropriate care to young children and their families; utilized to ensure that a trauma-informed lens is embedded within the competencies that EC educators need to understand and demonstrate.		

Note. ^a Collaborative for Understanding Pedagogy for Infant/Toddler Development ^b Interstate Teacher Assessment and Support Consortium

Identifying Superordinate Domains

During this stage of the analysis, a matrix was used to visually map the various frameworks together to compare sets of competencies. Each competency framework was inserted in individual columns, and specific competencies were listed in corresponding cells below. The purpose was to map multiple competency frameworks onto each other to identify essential components. The NAEYC *Professional Standards and Competencies for Early Childhood Educators* (NAEYC, 2019) served as the "backbone" for the mapping process, wherein components of other competency frameworks were aligned with its six standards, and additional categories were added if competencies did not align with the NAEYC standards. Workgroup members aligned competency segments based on commonalities, utilizing spreadsheet rows to link them under their respective framework columns. For example, competencies describing partnerships or relationships with families were rearranged to line up on a single row.

Next, an informal analysis was conducted to identify essential components, or key categories, assigning descriptive terms representing the rows of overlapping competencies in the far-left column. A subgroup of the workgroup then collapsed these descriptive terms into a set of superordinate domains that would be used to organize the final competency framework. This set included 12 superordinate domains (see Supplemental Table 1), which would later be revised to serve as the overarching domains for organizing the framework.

Stage Two: Synthesizing the Frameworks via Qualitative Research Tools and Analysis

In the second stage of synthesis and analysis, all relevant frameworks were coded using the identified superordinate domains described above, followed by deductive and inductive analysis. To facilitate this process, all ten frameworks were imported into MAXQDA 2022 (VERBI Software, 2021) for coding, using the superordinate domains identified in the matrix for the coding framework. This process ensured that the superordinate domains were applied across all ten frameworks and served as a critical means for extracting domain-specific competencies from the frameworks to merge and simplify the frameworks under each category.

Coding Procedures

Four members of the workgroup participated in the coding process. Each member of the coding team was assigned a subset of superordinate domains to code across all frameworks. Prior to coding, code domain descriptions were discussed until consensus was reached. Several rounds of coding took place, where each team member coded all frameworks with their assigned code(s) (i.e., 1–3 domains per person each round). After each round, the coding team met to discuss ambiguities and reclarify how each domain should be applied and operationalized. Another team member then reviewed each coded domain for agreement and consistency. Inter-rater reliability was not measured for this task; the aim was to ensure that codes were applied com-

prehensively but not too liberally while iteratively refining how each domain was operationalized. For instance, another team member reviewed frameworks for each domain coded to identify discrepancies or disagreements about coded segments (i.e., if segments were missed or differences in opinion for how the coding was applied). This technique was facilitated by recording how domains were coded in a shared coding record. Discrepancies were identified and later discussed by the coding group to reach a consensus.

This iterative coding process and discussion by the coding team aided the process of disentangling the complexity and overlap across the merged competencies to operationalize each domain category beyond the broad definition initially assigned to the superordinate domains. For example, differentiating among domains such as Child Development, Learning and Individual Differences, and Content Knowledge required extensive discussion and review of coded segments while distinguishing between what an educator needed to know versus what they needed to be able to do. Reflective Practice, Culturally-Sustaining Practices, and Supporting Social and Emotional Development, as well as other domains, were deeply intertwined within and across all other domains. Despite their cross-cutting nature, however, these categories also required specific delineation to explicitly identify competencies needed for early childhood knowledge and practice. The final iteration of category domains and descriptions included nine domains and three cross-cutting values, listed in Table 2.

After all domains had been coded across frameworks, each domain with its respective segments was extracted from MAXQDA 2022 into a summary document for further analysis. A preliminary review of coding results (i.e., relationships across domains, areas of emphasis or crossover, etc.) underscored the need to differentiate between competencies for knowing and competencies for doing, due to implications for how competencies would be assessed. This process also identified areas of substantial overlap and redundancy. Thus, to disentangle commonalities and differences, coded segments for each superordinate domain (i.e., category) were extracted into summary documents where deductive and inductive procedures were used to further extricate and refine descriptive competencies under each domain.

 Table 2

 Final Category Domains and Descriptions

Category Domain	Description
Child Development Knowledge, Content Knowledge, and Developmentally Appropriate Strategies/Instructional Practices	Understanding of the theoretical underpinnings of early childhood development and learning, typical development, individual differences, exceptionalities in development and learning as well as the developmental contexts; understanding of developmentally appropriate content knowledge, core concepts and practices, health and safety concerns; application of development, learning and content knowledge as strategies and instructional practices.
Partnerships with Families and Communities*	Knowledge and skills of forming positive partnerships with families and communities as a foundation for supporting child development and learning
Learning environments	Understanding the impacts of social and physical environments on development and learning, and applying this knowledge.
Reflective practice*	Examining one's own thoughts, feelings, and knowledge about child development and learning and how they influence behavior; critically examining the effect of one's behaviors on others; self-awareness, including biases; and continuous examination of one's practice for the purpose of improvement.
Culturally sustaining practice*	Recognizing diverse cultures, languages, and ways of being as critical assets to being intentionally centered and valued. Emphasis on engaging with each person as a unique and complex individual rather than a representative of their culture; valuing language, cultural practices, and intersectional ways of being; using curriculum and learning materials reflective of a variety of cultures; connecting with and being accountable to the community.

Category Domain	Description
Trauma-informed practice	Knowledge about the prevalence of trauma in children's lives, signs and effects of trauma on development, learning, and behavior; how to build predictable and safe environments and relationships that are attuned and supportive.
Supporting social and emotional development	Knowledge and skills required to support educators' relationships with children, children's relationships with other children, and educators' relationships with families.
Assessment, observation, and documentation	Understanding and use of formal and informal, formative and summative assessment, as well as systematic observations and documentation to monitor progress in development and learning, curriculum planning, and identification of additional support needs.
Professionalism	Knowledge and skills related to professional identity, roles, and scope of responsibility, including ethical and legal standards and requirements of the profession, and collaboration with colleagues. Commitment to continuous learning, reflection, and development to improve practice.

Note. *represent domains that also serve as cross-cutting values

Deductive Processes

Deductive procedures were used to provide a structured focus for the overarching goals of the framework. Using NAEYC (2019) as a guide, summary documents for each domain were reviewed, and overarching descriptions were combined in an initial summary document. This process facilitated the framework organization (e.g., key domains, subcategories, knowledge and skills, and cross-cutting values) and identified key challenges to address in subsequent inductive procedures. For instance, the vast overlap and redundancy within and across competency segments emphasized the need to explicate competency knowledge and skills within each domain without unnecessary repetition.

Inductive Processes

To address the vast amount of overlap and redundancy across domains, an inductive process was used to (a) ensure comprehensive representation and clear organization across domains and (b) reduce and simplify competency statements

into clear, definable, and measurable standards that maintained similar structure and syntax. Summary documents generated for each coded domain, including all coded segments for that domain and a list of any crossover domains, were analyzed. We then applied grounded theory methods (Charmaz, 2014) to break down each coded segment into a series of actions and processes, that is, identifying the elements within each competency standard that would help us further identify, synthesize, and summarize the competencies into a comprehensive but reduced and simplified version. These elements included: actor, action, acting with, acted upon, and for what purpose. See Table 3 for examples of this process. An inductive overview was shared with the workgroup to accommodate further discussion on what the competencies should include, what should be prioritized, and how to organize the competencies. For instance, an overarching informal analysis of the coded segments highlighted four areas of emphasis prominently demonstrated across competencies: the perspective of the educator toward children, then relationships with children, supported by theory and practice, and partnerships. These areas of emphasis informed the subsequent synthesis, reduction, and organization stages by laying a groundwork for prioritization.

The workgroup established a plan for organizing and synthesizing individual competencies under each domain during a full-day, in-person retreat. Teams of two to three workgroup members then collaborated to synthesize competencies within each domain into representative subcollections by reviewing the dissevered segments (e.g., Table 3) to identify subcategories, select critical competencies, and organize into *knowing*, *doing*, and *dispositions*. This step reduced redundancy while striving to retain the integrity of the concept (i.e., either choosing one that was representative or creating a composite/modified version). Although execution varied slightly across teams, the general process was the same. Each domain was then reviewed and integrated into a collective document by a team of two workgroup members, with which we generated an initial framework draft.

Table 3

	amples
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	Inductive
	Analysis
	uples of Inductive Analysis Procedures for Coded Competency Segments
	for
	Coded
	Competen
ı	icy
	Segment

Source Instructional Practices DEC-EI: Candio ECSE, (S6, vention) Component and ty 6.6) and en and en inclusi	Source Competency Segments Instructional Practices DEC- EI: Component 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. Component and facilitate access, participation, and engagement in natural environments and engagement in page 1. Learning 2. Learning 3. Learn	Overlapping Domains Play Child Development Early Learning Learning Environments Learning and Individual Differences Partnerships with Families and	Inductive Breakdown Use Responsive: Interactions Interventions Instruction With:
ECSE, (S6, 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.	 Child Development Early Learning Learning Environments Learning and Individual Differences Partnerships with Families and Communities Culturally Sustaining Supporting Social and Emotional Development Reflective Practices Professionalism 	Use Responsive: Interactions Interventions Instruction With: Sufficient intensity Types of support Across: Activities Routines Routines Child learning Child development AND to Facilitate: Access Participation Engagement In: Natural environments Inclusive settings

Source Learning and Rule 24, (S6,	Source Competency Segment Learning and Individual Differences Rule 24, (S6, Develop, implement, and evaluate IFSPs and	Overlapping Domains • Partnerships with Families and	Inductive Breakdown Develop
Rule 24, (S6, Element 6)	Develop, implement, and evaluate IFSPs and IEPs with family members and other professionals as team members, that support development and learning and caregiver responsive-ness, align individual goals with develop-mental and academic content, and support the child's independent functioning in the child's natural environment.	 Partnerships with Families and Communities Instructional Practices Supporting Social and Emotional Development Professionalism 	Develop Implement Evaluate - IFSPs - IEPs With - Family members - Other professionals (As members of a team) That support: - Development - Learning - Caregiver responsiveness - Child's independent functioning in natural environments That: - Align individual goals with: - Alopademic content - Academic content

Note. Bold emphasis is used to highlight areas specific to the domain of interest.

		(19)	Component	DEC-EI:	Culturally Susi	Source
	to meet the needs of each and every child and their family.	tions, and instruction addressing developmental and academic content domains, which are adapted	ronmental arrangements and appropriate materials to support the use of interactions interven-	Candidates engage in ongoing planning and use	Culturally Sustaining Practice	Competency Segment
		ferences Instructional Practices	 Learning Environments Learning and Individual Dif- 	Child Development and Early I earning		Overlapping Domains
 Instruction That are adapted to meet the needs of every child and their family. 	- Interactions - Interventions	- Appropriate materials To support the use of:	InstructionEnvironmental arrangements	Use <u>flexible_& embedded</u> :		Inductive Breakdown

Stage Three: Refining and Organizing the Framework

The initial draft of the competency framework, organized by superordinate domains, was reviewed again to ensure that each competency addressed one set of knowledge (i.e., knowing) or skills (i.e., doing) and was written using action verbs in a clearly measurable way. For example, if a competency was written, "understand and explain the important roles that families play in children's development and learning," we rephrased it to "explain the important roles that families play in children's development and learning" to clearly indicate the outcome to be assessed—in this instance, the ability to clearly articulate learned knowledge.

In addition, the workgroup examined whether the framework clearly addressed core competencies recommended by primary early childhood professional organizations (i.e., NAEYC, CEC-DEC), the state of Nebraska (i.e., Rule 20, Rule 24, Nebraska's Core Competencies), and national accrediting bodies of educator preparation programs (i.e., InTASC). A crosswalk document was developed to specify how each core competency was represented in the new competency framework draft, facilitating the identification of gaps or missing competencies. Overall, we found that the synthesized competency framework included a more clearly written and measurable set of competencies than any other frameworks that informed this work. The framework missed a few critical competencies; therefore, we addressed gaps by adding relevant competencies or incorporating the missing concepts into existing competencies.

Stage Four: Acquiring Community and Expert Feedback

In this final stage of development, a draft of the competency framework was shared with stakeholders and experts to acquire formal and informal feedback, including large- and small-group virtual discussions with RESPECT partners; i.e., workgroup members, RESPECT steering committee and advisory board, field experts, and early childhood educators. Feedback was incorporated after each iteration to refine the framework. The overarching questions explored in feedback sessions centered around the relevance and feasibility of applying the framework for all intended purposes across early childhood settings. Specifically, we inquired: (a) What is missing from the framework? (b) What should be eliminated or modified? (c) What areas are redundant? (d) Does this list seem feasible (usable) and comprehensively aligned to our statewide goals for early childhood care and education?

Competencies Workgroup

Workgroup members met regularly during the synthesis process to discuss challenges and implications and provide general feedback on framework development. Specific domain categories were reviewed to discuss the appropriateness of competencies, word choice, and organization. Modifications included combining and synthesizing redundant items within and across domains, refining specificity or al-

tering verbiage to be more precise or inclusive, modifying how competencies were organized across subcategories, and eliminating items that were overly specific (e.g., referring to specific practices regarding teaching content).

Team science principles and processes facilitated all stages of the work. For example, we kept our shared vision in the forefront (Bennett & Gadlin, 2012) to support decision-making. As teacher educators, we believe that all competencies are essential. However, to accomplish the goal of creating a competency framework that was feasible to employ and that could be operationalized and assessed, we understood the need to eliminate redundancies as much as possible and create a streamlined framework. We agreed that "everything is important," but negotiated to retain the elements we determined were *most* important for initial teacher certification. We honored the principle of constructive disagreement, inviting all perspectives, and keeping our overarching goal in mind (i.e., a competency framework that is complete, concise, clear, and feasible) as a touchstone for decision-making. As an illustrative example, we all agreed that practically many competencies are interrelated and practiced simultaneously or in the context of others. For instance, competencies in family partnerships overlap with culturally sustaining practice, and competencies that support children's social and emotional development intersect with knowledge of child development. Consequently, in the first stage of coding, there was a great deal of "overcoding" (i.e., coding a competency in multiple domains). We all agreed that the elements of competencies were necessary, and negotiations focused on where they fit within the framework and how to best represent them to avoid redundancy and improve clarity. These strategies were utilized to facilitate consensus in the practical aspects of the work among working partners.

RESPECT Steering Committee and Advisory Board

The process above was augmented by a virtual review meeting with the RE-SPECT Steering Committee, which included representation from all project partners (i.e., three universities, two tribal colleges, one community college, the state Department of Education and Nebraska Association for the Education of Young Children, the Buffett Early Childhood Institute), and the RESPECT Advisory Board, comprised of professionals from a variety of early childhood settings across the state (i.e., teachers, family child care providers, directors, principals, regional early childhood trainers, higher education faculty members). Participants were divided into groups of two to four individuals and assigned one domain category to review. Using the questions above, groups reviewed the draft framework, provided feedback through summarized input, and tracked changes in real time. These were then reviewed to revise the framework.

Early Childhood Caregivers and Educators

We sought input from early childhood practitioners in two ways: first, by inviting several early childhood educators to virtual review meetings, and second, through a presentation at a local early childhood conference. In these meetings, we presented an overview of the framework, its development, and purpose, and invited

individuals to review portions and provide their input. In the virtual review meetings, input was incorporated directly into the framework document during the meetings, with facilitators checking with educators to ensure that the changes captured what they intended. In the conference presentation, notes were taken directly, and content was incorporated into the framework after the presentation.

Expert Reviews

In addition to acquiring feedback from community members and RESPECT partners, we invited and compensated two external expert reviewers who were faculty members involved in teacher preparation, one at a community college and one at a 4-year college, to provide detailed feedback using a rubric we provided in a Qualtrics survey. Reviewers provided comprehensive feedback on clarity, completeness, usability, measurability, and general feedback on the complete framework draft. Responses were used to make subsequent revisions.

State Department of Education

A critical element of successfully integrating the competencies across programs was to facilitate alignment with state regulations for educator certification. To do this, members of the RESPECT team met regularly with representatives from the Nebraska Department of Education to discuss the development and positioning of the new framework, particularly at critical approval or decision points. Additionally, Nebraska Department of Education partners served as members of the RESPECT Steering Committee and associated workgroups. Discussions centered around alignment of the competencies with the state's governing documents for teacher preparation and certification, including Rule 20 and Rule 24 (see Table 1). This co-constructed process and meaningful collaboration throughout the project were designed to facilitate approval of the framework for teacher certification throughout the development process. Additionally, the workgroup maintained a record of sources for each new competency, providing transparency on where competencies linked back to original frameworks, to bolster confidence across partner institutions.

Reflections and Recommendations

The RESPECT Early Childhood Competency Framework project was undertaken to work toward three primary aims: to facilitate curriculum alignment across higher education institutions, to facilitate the design of assessments for practitioners to earn credit for prior experience, and to align competency standards with certification requirements. Designing a new, synthesized competency framework for early childhood educators served as the necessary groundwork for pursuing these aims. It positioned the competency framework as a foundational element connecting other core components of competency-based programming, such as curriculum design, assessment, and ultimately, learners' experiences and outcomes. The processes and procedures described in this paper provide fundamental insight into collaboratively synthesizing organizational standards into one comprehensive framework.

In the following sections, we reflect on the framework's development process, including strengths, challenges, limitations, future directions, and key takeaways for future initiatives. This work was marked by variance of goals and striving for reciprocity, both in the deliberations that undergirded the work as well as in its execution—by necessity, designing a framework of key standards and expectations for what early childhood educators should know and be able to do points directly to the overarching aims and mission of each respective organization. As such, collaboration among partners on this project was just as fundamental to this work as the technical procedures and tasks for its production, with both successes and setbacks along the way. These reflections are elaborated here to facilitate future endeavors.

Reflections on the Work

Strengths of the Work

Laying the groundwork for this project began with coming to a shared vision for the framework and the intention for which it was developed; that is, to support the preparation of early childhood professionals via accessible and equitable pathways, thereby strengthening the availability and quality of early childhood care and education for children and families. Creating a shared vision is a critical initial step in building a team and aiming for effective team science (Bennett & Gadlin, 2012). With this shared vision and intention, collaborative efforts and discussions centered on increasing accessibility, recognizing and valuing diversity in knowledge and practice, and ensuring diverse voices were always at the table, including prioritizing diverse views, acquiring formative feedback at each stage of development, and inviting constructive criticism from persons not typically centered in the development of new tools or systems (e.g., family child care home providers). Goals for increased equity were facilitated by team leadership promoting inclusivity and equity in procedures, processes, and decision-making.

Additional strengths were demonstrated in the practical aspects of the work. For instance, relying on qualitative methods and tools enhanced the workgroup's ability to reduce and simplify the necessary functions of the competency framework while preserving its comprehensive integrity. Workgroup collaboration also brought diverse perspectives and experiences to the work, enhancing the competencies' applicability, clarification, and organization. This collaboration was augmented by emphasis on introspection, self-reflection, and valuing constructive feedback, including asking questions such as, "Who decides what counts as a skill?" and "Who decides what knowledge is valuable for certification?"

Challenges of the Work

Two primary challenges in this work included the practical difficulties of synthesizing competencies and facilitating workgroup collaboration. The logistics of sifting through the amalgamation of standards, expectations, and descriptions of competencies was an overwhelming task, particularly when the original intent was to obtain a product that was simple enough to be achievable and diversely applied, and comprehensive enough to cover essentials and meet all stakeholder expectations. Here we leaned heavily on technical tools (e.g., MAXQDA) and the contributors' diverse perspectives and experiences to navigate that process. However, this task remained difficult, as workgroup members naturally held different views about what should be prioritized in achieving this aim; for example, prioritizing simplicity to facilitate ease of access versus prioritizing detail to facilitate measurability for transferability with courses and credits. Though the core priority was the same, operational priorities were sometimes at odds with each other, highlighting a key process in collaborative work across systems of learning and education; that is, while the integration of competencies was an effort for systems change and integration, the practicality of that work required interpersonal collaboration for which we leaned on principles of team science (Bennett & Gadlin, 2012) such as trust, maintaining a shared vision, honoring disagreement while containing conflict, and sharing credit.

Facilitating workgroup collaboration across multiple and different organizations also necessitated overcoming technical barriers; specifically, accessing shared data storage systems, scheduling, shared communication, and overall technology challenges. While primarily technical, these difficulties nevertheless proved to be a hindrance to collaborative teamwork if not addressed quickly. We relied on technology support within institutional systems, public access technology platforms, and frequent check-ins to find solutions to these challenges. In addition, thoughtful practice and intentional planning were needed to address the communicative aspects of collaborative work (e.g., acquiring feedback, balancing power dynamics, collecting and integrating prioritized needs and goals).

Technical barriers, variation in cultural approaches, and inequitable access to resources also challenged the intention of elevating marginalized voices in this work. For instance, project efforts to involve our state's Native American communities through a community-based research initiative highlighted the challenges of bringing marginalized voices to the table when such efforts levy additional strain on the limited resources and time of communities. Critical to addressing these challenges is the investment of time and effort in building trusting relationships across partnerships and communities to include marginalized voices and navigate differences in prioritized goals. Despite challenges, this framework remains a successful first step in bringing multiple voices and partners together to generate a single, comprehensive framework of early childhood competencies.

Limitations of the Developed Framework

Although designed to reflect best practices and evidence-based recommendations, the RESPECT Competency Framework is subject to the same limitations that impede any framework of this kind. For instance, specific competencies for early childhood professionals are not directly linked to developmental or learning outcomes in children (Cochran-Smith et al., 2015). Furthermore, such a framework's utility depends on subsequent steps of implementation. Additionally, reducing redundancy and over-specification in competencies is critical to acknowledging diversity. However, it remains insufficient; competency standards reflect prioritized goals

shaped by the various values and prioritized outcomes of the community that defines them (e.g., Rittel & Webber, 1973). Thus, it is naive to imagine that one system will apply to all situations and, subsequently, long-term consequences, especially for marginalized populations, should always be considered.

Future Directions

Developing a framework does not immediately or comprehensively address the challenges and goals that prompted its design; it is only the first step in redesigning complex systems that require integration into multiple assessment systems (e.g., prior learning assessments, coursework outcomes). To move into phases of implementation, future work of this project will involve developing assessments to measure the competencies, that is, integrating competencies with course syllabi and existing assessments, development and piloting of alternative competency-based assessments (e.g., a portfolio-rubric model), and generating assessment opportunities to earn college-credit for prior learning and experience. Additionally, continuing to educate partners and stakeholders will be necessary to ensure generalized buy-in across institutions and projects. It is impossible to predict the unintended consequences of any new initiative; thus, reevaluation and ongoing feedback loops will remain essential to meeting the foundational aims to embrace forthcoming challenges as opportunities to learn, decenter normative ways of navigating existing systems, and innovatively measure experience and learning.

Recommendations for Future Initiatives

Work of this kind relies on clarification of goals, self-reflection, building trusting relationships, and appreciation for diverse views (Bennett & Gadlin, 2012). This inclusive process relied heavily on intentional and transparently communicated practices facilitating collaborative teamwork and leadership. Data sharing was an unexpected but critical challenge due to the variation in technology platforms and firewalls used across different organizations. Consideration and planning are necessary to ensure data sharing is available and that partners can engage and contribute meaningfully to all aspects of the work.

In addition to building and sustaining accessible lines of communication among partners, we highly recommend clarification and a comprehensive understanding of end goals by all partners early in the process. Macro-level motivation, vision, and general priority may be easily adopted, whereas micro-level application and operationalization may be more ambiguous. For instance, administrators or team leaders may agree that more accessible pathways are a desirable outcome and a worthy goal. However, these same individuals may resist changing syllabi, policies, or even paradigms around what knowledge matters. To facilitate meaningful buy-in, a concerted effort is necessary to demonstrate to stakeholders and partners the practical value of this framework, beyond its aspirational intended outcomes. While this is to be expected of any collaborative undertaking, a shared understanding of practical matters

is critical for decision making and development, particularly regarding the practicalities of final application(s).

Possible recommendations to reduce the gap between conceptual goals and practical application include stakeholder workshops where partners co-construct the logistics around implementation of the framework, pilot implementation studies to showcase how the framework can work in real settings, providing evidence of its utility, employing targeted communication strategies with clear messaging that highlights the framework's relevance to stakeholder priorities, integration with existing initiatives wherever possible, and relying on key respected figures across institutions to endorse and advocate for the framework's adoption.

Furthermore, collaboration and responsiveness that center each institution's strengths and team are key elements to sustainable systems change, especially in a field where many agencies, teams, and individuals are involved, such as early childhood education. One recommendation is to establish a cross-sector advisory council including early childhood professionals, faculty from IHEs, families, community-based providers, advocacy groups, and state agency representatives to ensure a broad range of voices are included at each phase of the implementation process with shared accountability and built-in feedback loops. Additionally, embedding formal feedback mechanisms into existing processes like curriculum reviews, licensure changes, and policy updates might normalize stakeholder input rather than make it reactive or sporadic. This design could help detect unintended consequences, partners' concerns, or reluctance as the field and its pathways continue to evolve. Finally, iterative piloting of the framework and incorporating responsive data systems to collect both quantitative outcomes and qualitative feedback will facilitate institutions and credentialing bodies to work together to monitor the effects of the changes in real time and pivot when needed.

Conclusion

The development of the RESPECT Early Childhood Competency Framework was, by necessity, a multifaceted process defined by various needs. The work required a balancing act between specificity and conciseness, flexibility and measurability, and retaining the grounded work of prior frameworks while pursuing greater inclusivity anchored in the fundamental goals of competency-based education. Pursued to strengthen the early childhood workforce via accessible, affordable, and equitable pathways, this unique initiative challenged prior systems and processes to rework and reimagine new structures and supports that would acknowledge and value diverse approaches to early childhood care and education. Though the nature of this work will remain an ongoing pursuit, this framework is an essential step in the right direction toward a more humanizing way of recognizing people's skills, knowledge, and inherent value.

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