Preparing Early Childhood Teachers

Credentialing and Preparation Programs in Four States

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Executive Summary

Almost every state in the United States has invested in expanding publicly funded preschool and developing early childhood teaching credentials to ensure a high-quality preschool workforce. Research indicates that early childhood educators' formal preparation and skills in early child development are particularly important in successful public preschool programs.

Teachers of young children need a wide range of knowledge and skills that prepare them to support children's physical, social-emotional, and academic development. They need to be able to support learning in language, literacy, and math; establish safe, caring, and positive relationships with children and families; and recognize and effectively support children's culture, language, and individual needs. States need to ensure that teacher credentialing programs offer opportunities for candidates to gain these skills, and credentialing programs need to support the development of these skills through coursework and clinical experiences.

Through a national scan, we found that 46 states (including the District of Columbia) offer a stand-alone credential that certifies teachers for early childhood grades; however, there are considerable differences in requirements. Out of these 46 states, 44 also offer an early elementary or elementary credential that overlaps at least one grade with their early childhood credential. Although most states offer an early childhood teaching credential, fewer than half of states (19) require lead public preschool teachers to hold such a credential.

Many early childhood educator candidates face barriers to obtaining a teaching credential, including the high cost of tuition, a lack of time, and the difficulty of navigating higher education systems. These obstacles also pose challenges for preparation programs striving to recruit and retain diverse credential candidates.

This report provides policymakers and practitioners with a comprehensive understanding of the national landscape of early childhood teaching credentialing, identifies the key decisions states and preparation programs face when developing or revising early education credentials, and highlights common strategies that can strengthen early childhood teacher preparation programs.

We selected four states—Louisiana, Massachusetts, New Jersey, and New York—for study due to their efforts to implement high-quality early education systems. Within each state, we chose two IHEs that represent different approaches and pathways: Louisiana Tech University and Northwestern State University; Boston College and University of Massachusetts Boston; Montclair State University and Rutgers University–New Brunswick; and Bank Street College of Education and City College of New York.

State Early Childhood Credentialing Choices

State-level decisions play a critical role in shaping early childhood teacher credential programs, affecting their design, demographics of participants, and career opportunities for candidates. Among the four states studied, the credential age ranges considered "early childhood" differ: preschool to 3rd grade (P–3), preschool to 2nd grade (P–2), and birth to 2nd grade (B–2).

Administrators balance the need for broader labor market flexibility with the benefits of focusing more closely on early childhood development. To ensure that programs equip candidates with essential knowledge and skills, states either mandate specific courses or require accredited programs to align with professional standards. However, gaps remain in key areas such as math and partnerships with families.

The requirements for supervised placements, crucial for teacher preparation, vary from one semester to a full year. Louisiana stands out with its full-year of clinical experience, while Massachusetts and New York ease certification barriers by recognizing prior classroom experience. All four states require candidates to pass exams covering both prekindergarten (PreK) and early elementary content. Massachusetts and New Jersey also incorporated performance assessments to evaluate teaching readiness, while New York required them within teacher preparation programs. Massachusetts improved accessibility through a pilot program offering alternative assessments.

Preparation Program Design Choices

State guidelines outline the essential knowledge and skills required for credentialed teachers, but it is up to individual programs to decide how to organize these areas, determine the emphasis on each, and design effective field-based learning opportunities. Research on quality early childhood teacher preparation finds the following.

- Establishing a unified vision for preparation that informs courses, clinical work, and selection of partner schools enables success.
- Ensuring a deep grounding in all areas of child development and learning serves as a foundation and lens for other coursework and builds candidates' pedagogical skills.
- Integrating coursework and field-based experiences makes for a more powerful learning experience.
- Providing sustained and intensive supervised clinical experiences, such as full-year supervised clinical placements with strong mentorship and opportunities for reflection individually and in groups, strengthens practice.
- Developing strong partnerships with schools that instantiate best practices and provide a well-supported setting to learn to teach is crucial for providing quality clinical experiences.
- Offering personalized advising and mentorship enables close relationships with candidates throughout their education journey, particularly targeted support to meet credentialing requirements and mentoring during field placements.

Numerous approaches to structuring preparation programs enable early childhood educators to develop the necessary knowledge and skills. As the diverse cases we look at illustrate, these strategies for expanding quality can be implemented across a range of programs and pathways.

Pathways to Support Access

Part of developing a high-quality credential preparation program is being able to attract a diverse candidate pool and support candidates' success throughout the program. Early childhood educators come to the profession by varying routes. Different pathways are needed for candidates first entering the field of education, those seeking specialized learning related to young children, and those pursuing career advancement. The eight IHEs in this study designed multiple pathways for their candidates, including:

- pathways through integrated bachelor's degree and certification programs that can be completed in 4 or 5 years and connect undergraduate majors with the credentialing program;
- transfer pathways and statewide articulation agreements to facilitate routes that begin at community colleges and routes for nonmatriculated candidates (such as dual enrollment high school programs) that are more affordable for a wide range of teacher candidates;
- postbaccalaureate pathways for candidates who already hold a bachelor's degree to become certified and, in some programs, earn a master's degree;
- dual certification programs in early childhood and bilingual and/or special education; and
- teacher residencies that enable candidates to work full time as teachers alongside expert teachers while completing coursework that is integrated with their clinical practice.

States and districts also have designed expedited and tailored pathways to quickly increase the early childhood educator workforce needed to scale access to public preschool. Such efforts include designing programs that can be completed while working, crediting candidates' prior experience, and providing more customized coursework offerings.

Common Strategies and Enabling Factors to Support Access

Across the preparation programs and pathways studied, we identified common strategies used to attract people to the field of early childhood education and especially to reduce barriers to earning early childhood credentials for diverse candidates. These strategies included:

- subsidizing program costs and offering additional financial supports beyond tuition;
- reducing candidate requirements by aligning courses and giving credit for prior experience and coursework, including courses at the community college level;
- tailoring the location, modality, and timing of courses to meet candidates' needs by offering courses in a hybrid or online format, off-site at a community location, or on evenings or weekends;
- building a sense of community among candidates and faculty by creating cohort-based models and offering summer orientations for incoming candidates;
- conducting multipronged outreach and recruiting racially, linguistically, and culturally diverse candidates and faculty by partnering with local universities and state organizations, creating web-based resources that clearly lay out the pathways available, and diversifying the makeup of preparation faculty; and

- providing specialized advising and multifaceted supports, including academic and career advising, mentoring, writing and literacy support, and test preparation.

To offer high-quality programs and attract a diverse pool of early childhood teacher candidates, programs themselves need financial support for capacity building, and states and IHEs need additional data to inform their efforts.

Policy Recommendations

Based on the study's findings, we identified the following key policy and practice strategies.

- Design preparation program coursework and field-based experiences to develop the knowledge and skills required for effective early childhood educators in the key areas of literacy, early math, social-emotional learning, differentiation, and family and community engagement.
- Support the articulation and alignment of coursework across and within IHEs to enable more accessible pathways toward credentials for early childhood teachers.
- Develop intensive and coherent clinical experiences with frequent and comprehensive candidate supports by increasing supervised clinical placements to a full year, with frequent advising and opportunities for reflection.
- Create and support multiple pathways to an early childhood credential, including pathways for experienced educators, and create outreach strategies that provide information in multiple languages and modalities.
- Invest in building capacity for credentialing programs to design and implement accessible programs, provide candidate supports, hire diverse faculty with early childhood pedagogical expertise, and offer convenient courses (e.g., at community sites, on weekends or evenings, and in hybrid or online formats).
- Provide financial assistance and financial advising to early childhood educators seeking higher credentials and degrees to help them access local, state, and federal funding that reduces or covers tuition costs and incidental costs (e.g., books, credentialing fees, child care, transportation) and provides compensation for supervised clinical placements.
- Offer candidates multiple ways of demonstrating competence to meet credential requirements by crediting prior teaching experience and developing alternative assessments that are more performance-based to address barriers such as test cost, structure, and duration.

The state and city examples described in this study offer valuable lessons for policymakers in other states as they seek to develop or improve their early childhood credentialing systems. To monitor their success in serving candidates from diverse backgrounds and determine strategies for improvement, states can partner with IHEs to track credential candidate data such as demographics, previous education and experience, program enrollment and completion, and job placements. By setting up strong credentialing systems and offering supports to candidates and IHEs, states can develop highly skilled teachers capable of having positive, long-lasting impacts on young children.

Introduction

Given the evidence base demonstrating the benefits of preschool for both academic achievement and positive life outcomes,[1] most states have made investments to expand public preschool programs. Public preschool often encompasses a broad set of programs, including school-based preschool and prekindergarten (PreK), community-based preschool, and Head Start.

For these programs to benefit children, they need to be high quality. Research has identified several essential building blocks of high-quality preschool programs, including:

- early learning standards and curricula that address the whole child, are developmentally appropriate and culturally and racially responsive, and are effectively implemented;
- assessments that consider children's academic, social-emotional, and physical progress and contribute to instructional and program planning;
- support for multilingual learners and students with special needs;
- meaningful family engagement;
- sufficient learning time; and
- small class sizes with low student–teacher ratios.[2]

Effective implementation of these components requires knowledgeable and skilled early childhood educators. Consequently, the preparation and support of the early childhood educator workforce is a necessary condition for reaping the benefits of public investment in preschool.[3]

As states expand public preschool, states and institutions of higher education (IHEs) must work in tandem to develop and support a high-quality public preschool workforce. Insights into how states and IHEs have navigated PreK expansion and early childhood credential development can inform future program and policy development in creating accessible credentialing pathways to meet workforce demands, designing high-quality preparation program content and clinical experiences, and sustaining the diversity of the ECE workforce.

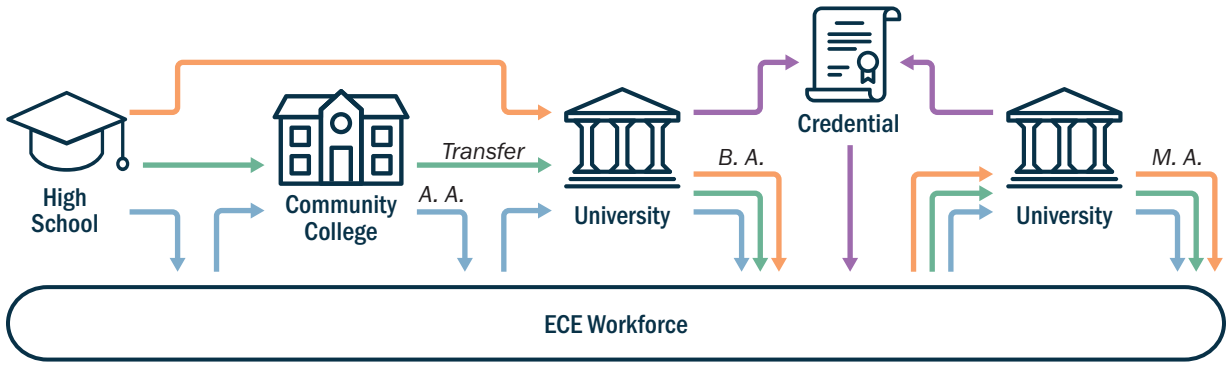
This report is intended to give policymakers and practitioners a clearer understanding of the national landscape of early childhood teaching credentialing, to explore the critical decisions states encounter when creating or revising teaching credentials, and to identify common strategies that can enhance the quality of these programs. Through exploring how four states, and two IHEs within each state, have built or refined early childhood credentials and preparation pathways, the report offers valuable insights and implications for policy and practice aimed at strengthening the development of well-qualified, diverse early childhood teachers across the country.

Challenges in Developing a High-Quality Early Childhood Educator Workforce

Research indicates that early childhood educators' formal preparation and skills related to early child development are particularly important in successful ECE.[4] Effective early childhood educators need to be able to gather information about children's development through observation, assessment, and conversations with families and to use this critical contextual information to appropriately support and individualize learning opportunities for every child across the developmental spectrum.[5] They must acquire skills in developing positive relationships with children and families, as well as in crafting opportunities for learning across the developmental domains of social and emotional, cognitive, language and literacy, math and science, and physical development. Early childhood educators also need to be able to consistently cultivate their knowledge and skills to better support diverse populations of children, including children from historically marginalized racial backgrounds and multilingual learners; children who have experienced adverse childhood experiences, chronic stress, or trauma; and children whose progress falls outside of typical developmental trajectories.

Specialized preparation is critical to cultivate these competencies. However, there is not a single traditional path into the early childhood educator workforce. On the programmatic side, some early education positions do not require a credential; for instance, educators in private programs or assistant teachers often are required to hold only a Child Development Associate (CDA) credential or another state-specific child development permit. On the individual educator side, some early childhood educators return to IHEs at various points throughout their careers to pursue additional credits, permits, degrees, or credentials. Some early childhood educators may go straight from high school to college to earn a permit, degree, license, or credential in ECE. Regardless of the individual path taken, many early childhood educators return to school while working in the field to gain knowledge and advance their careers. Still others have a degree in a field other than ECE and go back to school to specialize (see Figure 1).

Figure 1. Early Childhood Educator Preparation Pathways



Source: Adapted from Gardner, M., Melnick, H., Meloy, B., & Barajas, J. (2019). *Promising models for preparing a diverse, high-quality early childhood workforce*. Learning Policy Institute.

Educator qualifications and preparation vary widely across ECE programs and states, with few early childhood educators participating in in-depth formal education or educator training prior to entering the classroom.[6] The lack of formal training and preparation can be expected to result in less effective instruction. Lower levels of training are also associated with higher turnover rates, which is one of the factors contributing to the instability of the early childhood educator workforce.[7]

The early childhood educator workforce is also more racially, ethnically, culturally, and linguistically diverse than the K–12 workforce.[8] On the one hand, this diversity is a strength of the workforce, as research shows that educators who reflect the ethnic, cultural, and linguistic backgrounds of the communities they serve may be better equipped to develop relationships with students and families.[9] On the other hand, it also signals that the early childhood educator workforce may face greater obstacles in pursuing higher education, for the reasons described in this section.

As part of preschool expansion, many states have developed an early childhood teaching credential that is required for lead teachers in publicly funded preschool programs. Candidates may face barriers to obtaining such a credential, however, including the high cost of tuition, lack of time, and difficulty navigating the higher education system. These barriers are particularly pronounced for early childhood educators due to persistently low wages in the field. Across settings, preschool teachers' median hourly wage ($14.67) is more than $18 less than the median hourly wage for kindergarten teachers ($32.80).[10]

On top of this, the Economic Policy Institute has calculated that, on average, K–12 teachers earned 73.6 cents for every dollar that other comparable professionals made in 2022.[11] Financial burdens have been found to be a key contributor to reduced completion among candidates generally, as candidates who need to work to pay tuition and meet family needs are likely to take fewer courses, progress more slowly, and drop out before completing their program.[12]

Research shows that these obstacles to obtaining additional education or degrees are more likely to negatively impact candidates of color than other candidates.[13] In addition to financial obstacles, candidates of color may encounter academic obstacles to completion if their prior learning experiences underprepared them for higher education–level coursework[14] or if coursework is not offered in their first language. They may also be more likely to have competing family responsibilities, lack reliable transportation, or find that the program faculty or environment does not reflect their culture or experience.[15]

These obstacles also pose challenges for early childhood educator preparation programs in recruiting and retaining diverse credential candidates. States and IHEs designing early childhood credentials and planning credential programs need to develop policies and structures that foster the conditions necessary for diverse candidate recruitment and success as well as program quality. Creating a diverse workforce requires attention both to the needs of experienced early childhood educators seeking to earn their teaching credential and to strategies for recruiting new people to the ECE field.

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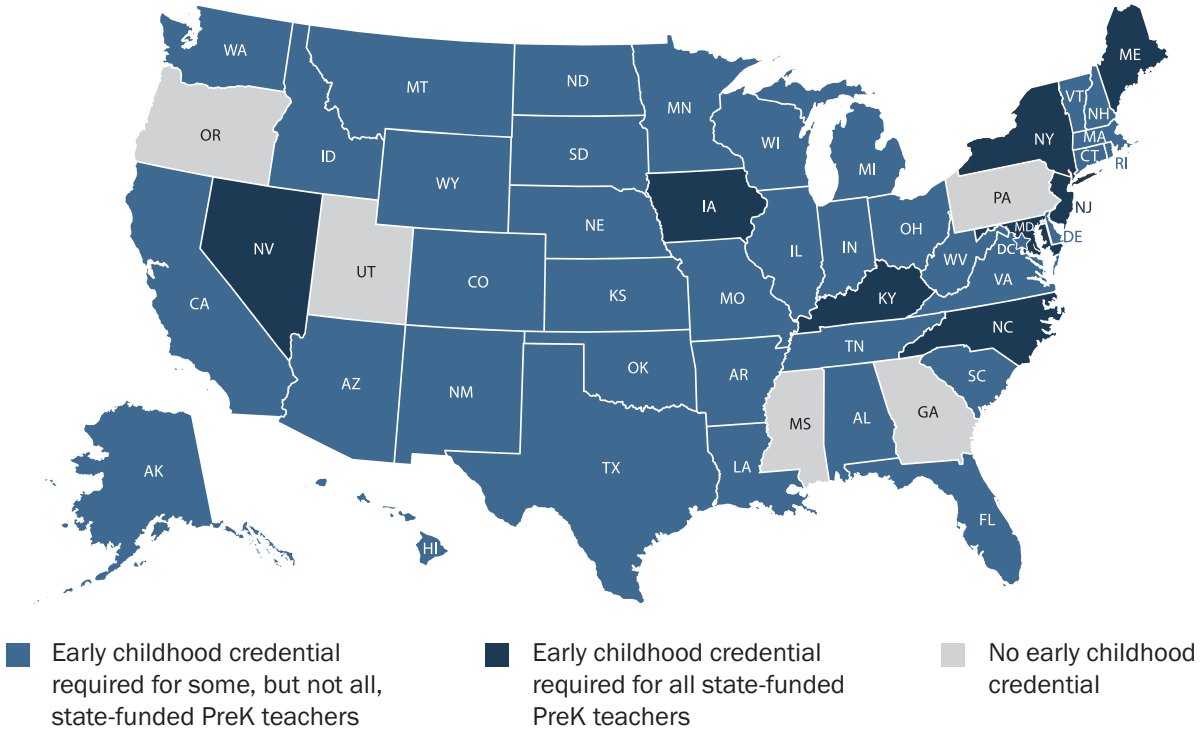
National Early Childhood Credentialing Trends

Almost every state in the United States has invested in expanding publicly funded preschool and developing early childhood teaching credentials.[16] Early childhood teaching credentials are needed to build a strong teaching workforce with specialized knowledge and skills in early childhood development and learning. We conducted a national scan of early childhood teaching credentials, which we defined as a credential that (1) can be obtained on its own (not only as an added authorization to another credential); (2) extends at least 1 year below kindergarten, and (3) focuses on early childhood, which we define as anywhere from birth through grade 3 (e.g., includes preschool–3rd and birth–2nd, but not K–6 or PreK–5).[17] We found that 46 states (including the District of Columbia) offer a stand-alone credential that certifies teachers for early childhood grades (see Figure 2).[18]

Figure 2. States with an Early Childhood Teaching Credential



Source: Learning Policy Institute analysis of state credential data gathered from individual state education agency websites and statutes. (2022).

The most common age spans for stand-alone early childhood credentials are birth through 3rd grade (B–3) and prekindergarten through 3rd grade (PreK–3), followed closely by birth through kindergarten (B–K). Across all offered credentials, 20 states offer only credentials that begin at children's birth and go through the preschool or early school-age years, 17 offer only credential(s) that focus on preschool and early school age, and 9 states offer multiple credentials with age spans beginning at both birth and preschool or later (see Table 1 and Appendix A).

Table 1. State Early Childhood Credential Age Spans

Early childhood credential age span	States
Credential begins at birth	AR, AZ, CO, CT, DE, ID, IL, KS, KY, MN, MO, NE, NV, NH, NY, NC, SD, WA, WI, WY
Credential begins at preschool	AL, AK, CA, DC, HI, IN, MD, MA, MT, NJ, OH, OK, RI, SC, TX, VA, WV
One credential that begins at birth and another that begins at preschool	FL, IA, LA, ME, MI, NM, ND, TN, VT
No credential	GA, MS, OR, PA, UT

Sources: Friedman-Krauss, A. H., Barnett, W. S., Garver, K. A., Hodges, K. S., Weisenfeld, G., Gardiner, B. A., & Jost, T. M. (2022). *The state of preschool 2021: State preschool yearbook*. National Institute for Early Education Research; Learning Policy Institute analysis of state credentialing statutes and regulations. (2023).

Out of the 46 states with a stand-alone early childhood credential, 43 also offer an early elementary or elementary credential that overlaps one to four grades with their early childhood credential but does not go below kindergarten. Among these, the most common overlapping credential is K–6 (see Appendix A).

Despite most states offering a stand-alone early childhood teaching credential, fewer than half of states (19) require lead public preschool teachers to hold an early childhood teaching credential (see Appendix A).[19] In most of these states, a credential is only required in school-based preschool. Only eight states require state preschool teachers in community-based settings to have a credential (see Appendix A).[20]

In all states, the qualification requirements for early childhood assistant teachers are lower than for lead teachers in both state-funded public and nonpublic preschools. About a third of states (18) have no formal requirements for the qualifications of assistant teachers in state-funded preschool settings. The slightly more than half of states (27) that do require specific training in early childhood education for assistant teachers vary in their criteria, typically requiring a certain number of college credits in early childhood education (often nine), paraprofessional certification, or a CDA credential.

Policymakers likely maintain relatively low preschool lead and assistant teacher qualification requirements to alleviate recruitment challenges. Increased requirements would require a commensurate increase in compensation to avoid exacerbating workforce shortages. Yet, given the importance of educator quality and preparation for preschool effectiveness, many experts are concerned that modest preparation requirements threaten preschool programs' ability to successfully support young students' academic, social-emotional, and physical development.[21]

When developing the requirements for early childhood teaching credentials, states need to consider who will be required to hold a credential, the key content of the credential, where credential holders could work, potential overlap with elementary credential holders, and the labor conditions of the work

environments (e.g., compensation and benefits, school and district leadership). The choices that state policymakers make impact the design of early childhood teacher credential preparation programs, who attends, and candidates' experience and workforce options.

About the Study

The goals of this study were threefold: (1) to provide a better understanding of the national landscape of early childhood teaching credentialing; (2) to highlight the types of decisions that need to be made if a state decides to create or revise an early education teaching credential; and (3) to identify commonalities, differences, and areas for improvement in the decisions states and well-regarded preparation programs have made as they developed or revised their early childhood teaching credentials and credential programs.

To better understand the approaches states take to early childhood teacher credentialing, we selected four states—Louisiana, Massachusetts, New Jersey, and New York—for study; these states have made efforts to implement high-quality early education systems with above-average rates of 4-year-old preschool participation and preschool student diversity.[22] Within each state, we chose two IHEs that operate at least one early childhood credential program; seven out of the eight IHEs offer credentialing pathways through both baccalaureate and postbaccalaureate programs. The findings and implications are relevant for practitioners and policymakers across the country who strive to recruit and prepare a high-quality and diverse early childhood educator workforce.

The report draws on data gathered in the 2021–22 school year through a series of interviews with state credential administrators and preparation program staff, as well as through document review of state policies, credentialing data, and preparation program materials, including course descriptions. (See Appendix B for a list of study participants.) We included any data that were available on program effectiveness and the race/ethnicity of candidates or completers of the preparation programs we studied. For the majority of preparation programs, data were available only for teacher preparation enrollees and completers at all levels, rather than for those in the early childhood credential programs alone.

The report first provides an overview of the four states and eight IHEs included in the study. It then details states' early childhood credential choices, including how the policies were developed and how they are perceived by various constituencies. Next, the report examines the choices the preparation programs made in designing coursework and clinical experience. This section also includes a summary of common strategies for expanding quality early childhood teacher preparation based on profiles of three differently designed programs in both undergraduate and graduate settings. This section is followed by an examination of the multiple pathways for supporting access to and through early childhood credential programs. The report then includes a summary of the common strategies and enabling factors for further diversifying the pool of early childhood educator credential candidates. Finally, the report concludes with recommendations for policymakers and practitioners as they develop robust early childhood educator preparation to support a high-quality and diverse ECE workforce.

Study States and Institutions of Higher Education

This section of the report provides an overview of each state, including demographics of its young children (see Table 2), descriptions of the state's public early childhood programs, and each state's early childhood teaching and credentialing requirements (see Table 3). It also includes detailed information on the institutions of higher education (IHEs) chosen for this study.

The four states studied in this report are **Louisiana**, **Massachusetts**, **New Jersey**, and **New York**. All four of these states have at least one stand-alone early childhood credential and require lead teachers to obtain this credential to teach in public preschool settings. All four also offer state and federally funded public early childhood education (ECE) programs within their mixed delivery system, including state-funded prekindergarten programs, federally funded Head Start, and federally funded special education programs. Within each state, we selected two IHEs operating one or more early childhood credentialing programs. We selected the IHEs to ensure that (1) at least one of the IHEs in each state was a public institution and (2) they represented a range of different types of preparation programs, such as expedited programs for experienced early childhood educators, online and hybrid programs, residencies, and dual certification programs in bilingual or special education. (See Appendix C for the full list of selection criteria for states and IHEs.) We selected the following IHEs for further study:

- Louisiana: Louisiana Tech University (LA Tech), Northwestern State University (Northwestern State)
- Massachusetts: Boston College, University of Massachusetts Boston (UMass Boston)
- New Jersey: Montclair State University (Montclair), Rutgers University–New Brunswick (Rutgers)
- New York: Bank Street College of Education (Bank Street), The City College of New York (CCNY)

Table 2. Child Demographics of States Studied

Demographic characteristics of children under age 5	Louisiana	Massachusetts	New Jersey	New York
Number of children	285,149	346,922	519,195	1,099,062
American Indian/Alaska Native (non-Hispanic)	1%	<0.5%	<0.5%	<0.5%
Asian (non-Hispanic)	2%	8%	10%	9%
Black (non-Hispanic)	36%	9%	13%	15%
Hispanic or Latino	9%	22%	30%	25%
Native Hawaiian and Other Pacific Islander (non-Hispanic)	<0.5%	<0.5%	<0.5%	<0.5%
White (non-Hispanic)	49%	56%	43%	46%
Two or more races (non-Hispanic)	4%	5%	4%	4%
Poverty rate[a]	28%	13%	15%	19%
Dual language learners[b] (age 0–8 years)	11%	39%	46%	44%

[a] "Poverty rate" refers to the share of children who live in families with incomes below the federal poverty level. A racial and ethnic breakdown of poverty rates for children under age 5 can be found in each state section of the report.

[b] "Dual language learners" are children who have at least one parent who speaks a language other than English at home. Throughout the report, "multilingual learners" is the preferred term to describe students who are learning more than one language; however, we use "dual language learners" when it is the specific terminology used by a data source.

Note: Number of children, racial and ethnic demographics, and poverty rate are based on 2021 data; data on dual language learners are from a 2015–2019 data set.

Sources: The Annie E. Casey Foundation. (n.d.). *KIDS COUNT Data Center* [Data set]. (accessed 04/27/2023); U.S. Census Bureau. (2021). *Poverty status in the past 12 months*. (accessed 03/15/2023); Migration Policy Institute. (n.d.). *Young dual language learners in the United States and by state*. (accessed 03/15/2023).

Table 3. Summary of State Credentialing Requirements

Requirements	Louisiana (PreK–3)	Massachusetts (PreK–2)	New Jersey (P–3)	New York (B–2)
State role in coursework	Requires specific number of coursework hours in specified topic areas	Specifies guidelines for subject matter knowledge, aligned to state curriculum frameworks, and detailed indicators for teachers' professional standards	Requires that preparation programs align coursework with the state's professional standards for teachers and leaders	Outlines general pedagogical core requirements for all certification areas, as well as program-specific content and pedagogical core requirements for the B–2 certification
Core skills exams	No	Yes	Yes	No
Content and pedagogy exams	Yes	Yes	No	Yes
Performance assessment	No	Yes	Yes[a]	Yes[b]
Required length for clinical experience	1 year	1 semester	2 semesters	70 days (for candidates who enter a program in fall 2024 or later)[c]
Required setting for clinical experience	1 setting	2 grade levels (PreK–K and 1st–2nd)	2 settings	3 settings through combined field experiences and student teaching (PreK, K, and 1st–2nd)
Option to add early childhood to existing credential	Yes	Yes	No	Yes
General requirements to add early childhood to existing credential	Coursework and/or exams	Clinical experience and exam	N/A	Coursework and exam

[a] Beginning spring 2024, teacher credential candidates are not required to take an externally administered performance assessment (the edTPA). Instead, New Jersey educator preparation programs are responsible for determining the performance assessment for program completion and credential obtainment.

[b] In 2022, New York revised its licensure performance assessment requirement to shift from the externally administered edTPA to an internally program-administered or program-developed teacher performance assessment.

[c] New York also requires 100 hours of field experience before student teaching.

Note: B = birth; N/A = not applicable; P = preschool; PreK = prekindergarten.

Sources: Louisiana State Board of Elementary and Secondary Education. (n.d.). *Policies/bulletins* [Bulletin 745, Bulletin 996] (accessed 12/16/2022); Louisiana Department of Education. (2022). *Louisiana certification exams and required scores*; Massachusetts Department of Elementary and Secondary Education. (n.d.). *Educator licensure and preparation program approval regulations*; Massachusetts Department of Elementary and Secondary Education. (2023). *Subject Matter Knowledge (SMK) guidelines*; Massachusetts Department of Elementary and Secondary Education. (n.d.). *Candidate Assessment of Performance (CAP)*; Massachusetts Department of Elementary and Secondary Education. (n.d.). *License types and validity*; New Jersey Administrative Code § 6A:9B; New Jersey Department of Education. (n.d.). *Certification performance assessment requirement* (accessed 05/28/2025); New Jersey Department of Education. (2023). *Certification performance assessment requirement: Educator preparation program guidance*; New Jersey Department of Education. (n.d.). *Teacher candidate basic skills requirement*; New York State Education Department. (n.d.). *General and program specific requirements for early childhood education teacher certification*; New York State Education Department. (2023, May 4). *Proposed amendment of Sections 52.21 and 80-3.7 of the regulations of the Commissioner of Education relating to the student teaching requirements for registered teacher preparation programs and through the Individual Evaluation Pathway to Certification* [Memorandum]; New York State Education Department, Office of Teaching Initiatives. (n.d.). *Certification test requirements*; New York State Department of Education, Office of Teaching Initiatives. (n.d.). *Search certification requirements*.

Louisiana

Demographics of Preschool-Age Children

About half of Louisiana's children under the age of 5 are children of color (see Table 2). The state has one of the highest rates of child poverty in the United States, with disparities across racial and ethnic demographic groups: 46% of Louisiana's Black or African American children under age 5 live in households with incomes below the federal poverty level (FPL), while 14% of non-Hispanic White children under age 5 do.[23] About one tenth of Louisiana's children ages 0 through 8 are dual language learners.[24] Louisiana does not have publicly available data on its early childhood workforce demographics.[25]

State Preschool Programs and Enrollment

In addition to federally funded programs, Louisiana offers three state-funded preschool programs.[26] The Cecil J. Picard LA 4 Early Childhood Program is the largest of the three state preschool programs and serves 4-year-old children living at or below 200% of the FPL in public schools, independent local education agency (LEA) charter schools, and tribal schools. The 8(g) Student Enhancement Block Grant Program serves 4-year-old children, with priority given to students living at or below 200% of the FPL. The Nonpublic School Early Childhood Development Program supports nonpublic settings serving 3- and 4-year-olds living at or below 200% of the FPL.

As of 2022, 19% of Louisiana 3-year-olds were enrolled in a public early childhood education program, which refers to any publicly funded preschool program, including state-funded prekindergarten, Head Start programs, and programs for 3- to 4-year-old special education students served by Individuals With Disabilities in Education Act (IDEA) preschool grants.[27] Three-year-olds primarily attended Head Start (18% of all Louisiana 3-year-olds), while 0.4% of 3-year-olds were enrolled in a special education program and 0.2% were enrolled in a state-funded PreK program.

Forty-two percent of Louisiana 4-year-olds were enrolled in a public early childhood education program, with 30% enrolled in a state-funded PreK program, 10% in Head Start, and 2% in special education.[28]

Early Childhood Credentials Offered

Louisiana currently offers two credentials that cover the PreK age group: a birth through kindergarten (B–K) credential and a prekindergarten through 3rd grade (PreK–3) credential. For the purpose of this study, we focus only on Louisiana's PreK–3 credential due to low numbers of Louisiana teachers with the B–K credential: In 2019, only eight teachers in the state held the B–K credential, compared to 5,673 educators with a PreK–3 credential (see Table 8). Additionally, Louisiana offers an elementary credential that certifies teachers to teach grades 1 through 5.

All Louisiana state-funded preschool lead teachers in public and nonpublic settings are required to have an early childhood credential (see Table 4).[29]

Table 4. Louisiana PreK–3 Credential Requirements

Element	Requirement
Coursework	39 general education semester hours 33 early childhood education semester hours
Assessments	Core Academic Skills Exams Praxis Elementary Education Exam: Multiple Subject Praxis Principles of Learning and Teaching Exam: Early Childhood
Clinical experience	1-year, full-time clinical placement

Note: A PreK–3 credential is required of all state-funded PreK offered in public schools. Teachers in private or community-based centers participating in the Louisiana Nonpublic Schools Early Childhood Development Program must be certified or working towards early childhood certification.

Sources: Louisiana State Board of Elementary and Secondary Education. *Policies/bulletins*. [Bulletin 746, pp. 3–4 and Bulletin 996, p. 2]; Louisiana Department of Education. (2022). *Louisiana certification exams and required scores*.

Early Childhood Credential Requirements

In order to earn a PreK–3 credential, candidates must have a BA in Early Childhood Education (ECE) and have completed an integrated bachelor's preparation program. The integrated bachelors program requires 39 semester hours of general education, 33 hours in ECE coursework, an additional 15 hours in pedagogical coursework, and a yearlong clinical placement in either a public or approved nonpublic PreK–3 classroom (see Table 4).[30] Louisiana has a tiered credentialing system: Entry-level educators receive a Level 1 license, which is valid for 3 years, and they may receive a Level 2 license with 3 years of experience in an approved educational setting. Requirements to receive Level 1 and Level 2 professional certificates are outlined in Table 4. Teachers certified in a different age group can add the PreK–3 early childhood credential through additional coursework or exams.

Preparation Program Approval Process

The Louisiana Board of Elementary and Secondary Education reviews all teacher preparation programs to determine whether they are designed to ensure candidates' mastery of the Louisiana teacher preparation competencies; have targets and processes for mentor teacher recruitment, development, and evaluation; and ensure that they assess candidates' skills during their 1-year clinical experience in alignment with the partner LEA's teacher evaluation system.[31] The board reviews and renews the preparation programs every 2 years during its first accountability cycle; programs that receive a rating of Level 3 or above (on a scale of 1–5) are subsequently reviewed every 4 years.

Louisiana Tech University

Louisiana Tech University (LA Tech), located in Ruston, LA, on the northeastern side of the state, was founded in 1894 to develop an industrial economy in the state. Preparation of teachers was central to this mission.[32] LA Tech offers two programs that result in an initial PreK–3 teaching credential: the Bachelor

of Science in Early Childhood Education program and Master of Arts in Teaching in Early Childhood Education program.[33] Both of these programs are housed in the College of Education and Human Sciences, Department of Curriculum, Instruction, and Leadership.

From 2018 to 2020, the Bachelor of Science program graduated 48 candidates and the Master of Arts in Teaching program graduated 18 candidates. During the same years, among the 328 completers across both of LA Tech's teacher preparation programs, baccalaureate and postbaccalaureate, 90% were White, 6% Black/African American, 2% two or more races, 1% Asian, and 1% American Indian or Alaska Native.[34]

Northwestern State University

Northwestern State University (Northwestern State), located in Natchitoches, was founded as the Louisiana State Normal School for the preparation of teachers in 1884.[35] Northwestern State has four programs that lead to an initial PreK–3 teaching credential: the Early Childhood Education Bachelor of Science, Master of Arts in Teaching, Master of Education, and a nondegree, credential-only program. All of the programs are housed in the university's College of Education and Human Development.[36]

From 2018 to 2020, the Bachelor of Science program graduated 19 candidates, while the three postbaccalaureate programs combined graduated 27 candidates. During the same years, among the 304 completers across all Northwestern State teacher preparation programs, baccalaureate and postbaccalaureate, 81% were White, 11% Black/African American, 4% Hispanic/Latino, 3% two or more races, 1% Asian, and 1% American Indian or Alaska Native.[37]

Massachusetts

Demographics of Preschool-Age Children

Almost half of Massachusetts' children under 5 are children of color (see Table 2). Massachusetts has a poverty rate for young children lower than most states, though racial disparities exist: Among its children under age 5, Hispanic or Latino and children of two or more races are more likely to live in households with incomes lower than the FPL (30% and 21%, respectively), while children identifying as Asian and Pacific Islander and non-Hispanic White are less likely to live in poverty (5% and 7%, respectively).[38] About 4 in 10 of Massachusetts children ages 0 through 8 are dual language learners.[39]

Demographics of the Early Childhood Workforce

Massachusetts is the only state studied that has publicly available demographic data on its early childhood workforce, disaggregated by demographics across center educators and family child care providers serving both preschool and infant–toddler settings.[40] The majority of center-based educators in the state identify as White (66%), followed by Hispanic/Latino (15%), Black or African American (14%), and Other (13%). Similarly, the majority of family child care providers identified as White (73%), followed by Hispanic/Latino (32%), Other (16%), and Black or African American (8%).

State Preschool Programs and Enrollment

In 2005, Massachusetts launched its universal prekindergarten initiative through the establishment of the Department of Early Education and Care. In 2019, the Department of Early Education and Care launched the Commonwealth Preschool Partnership Initiative to support high-quality preschool access for children from 33 months of age through the locally determined kindergarten eligibility age.

In 2022, 20% of 3-year-olds in Massachusetts attended a public preschool program, with 13% in state-funded PreK and 7% in Head Start. Thirty-one percent of 4-year-olds attended a public preschool program, with 25% in the state's prekindergarten program, 6% in Head Start, and 0.3% in special education.[41]

Additionally, Boston Public Schools began supplementing state funds with local funds to expand access to state-funded PreK for all 4-year-olds in 2005, increasing the number of children served from 750 to about 6,000 students (approximately 90% of the eligible population) within the span of 5 years.[42]

Early Childhood Credentials Offered

Massachusetts offers one early childhood teacher credential, prekindergarten through 2nd grade (PreK–2), and an elementary credential (grades 1–6).

All lead teachers in state-funded public preschool and public kindergarten are required to obtain the PreK–2 credential or add an early childhood endorsement to an existing credential. The PreK–2 credential is not required for lead teachers in state-funded nonpublic settings. Different certifications for positions in nonpublic, licensed child care settings are overseen by the Massachusetts Department of Early Education and Care.[43]

Early Childhood Credential Requirements

Massachusetts does not specify course credit hours, but it has subject-matter knowledge guidelines and professional standards for teachers that align with the state's learning standards for students. The subject matter knowledge guidelines inform preparation programs about content expectations for educator candidates and what is needed to obtain program approval.

To receive an initial license, PreK–2 candidates are required to have 300 hours of clinical experience; preparation programs have discretion to count previous classroom experience for up to half the required clinical hours (see Table 5). All PreK–2 candidates are required to take the Candidate Assessment of Performance as well as two subject matter tests for early childhood education. Initial licensure is valid for 5 years. For full professional licensure, Massachusetts teachers must complete a 1-year induction program with a mentor and at least 50 hours of a mentored experience beyond the induction year, have at least 3 full years of employment with their initial license, and complete an additional professional licensure program leading to master teacher status eligibility or at least 12 credits of graduate-level courses in an advanced graduate program.[44] If a teacher wishes to add the early childhood credential to an existing license, they must complete a 150-hour internship and pass relevant content exams.

Table 5. Massachusetts PreK–2 Credentialing Requirements

Element	Requirement
Coursework	Must be aligned with state subject matter frameworks in: • English language arts/literacy • Mathematics • Science and technology/engineering • History and social science
Assessments	Massachusetts Tests for Educator Licensure (MTELs): • Communication and Literacy Skills Test • Early Childhood • Foundations of Reading MA Candidate Assessment of Performance
Clinical experience	1 semester or 300 hours

Note: A PreK–2 credential is required of all teachers in state-funded PreK in public schools. It is not required of teachers in state-funded PreK in private or community-based centers.

Sources: Massachusetts Department of Elementary and Secondary Education. *Educator licensure and preparation program approval regulations*; Massachusetts Department of Elementary and Secondary Education. (2022). *Subject Matter Knowledge (SMK) Guidelines*; Massachusetts Department of Elementary and Secondary Education. *Candidate Assessment of Performance (CAP)*; Massachusetts Department of Elementary and Secondary Education. *License types and validity*.

Preparation Program Approval Process

The Massachusetts Department of Elementary and Secondary Education reviews and approves teacher preparation programs every 7 years, examining programs' organization, partnerships, continuous improvement, candidate experience, field-based experiences, and instruction.[45]

Boston College

Boston College is a private Jesuit research university located just outside Boston in Newton, MA. Boston College has two pathways leading to a PreK–2 teaching credential: the Master of Education in Early Childhood Education and the Master of Education Donovan Urban Teaching Scholars program for PreK–2. Both pathways are housed in the Lynch School of Education and Human Development's Department of Teaching, Curriculum, and Society.[46]

The Donovan Urban Teaching Scholars program commits to recruiting aspiring educators of color, and the vast majority of Donovan scholars are candidates of color.[47] In the Master of Education in Early Childhood Education program, approximately half of candidates at the time of study were candidates of color.[48]

In the 2020–21 school year, Boston College graduated eight candidates from its postbaccalaureate early childhood preparation programs. In the same year, out of the 273 enrolled candidates across both of Boston College's teacher preparation programs, 44% were White, 10% Hispanic/Latino, 9% Black/

African American, 8% Asian, and 2% two or more races. Twenty-nine percent of candidates did not report their race. Among the same population, 67% were female, 16% were male, and 17% did not report their gender.[49]

University of Massachusetts Boston

The University of Massachusetts Boston (UMass Boston) is a public research university and the third-largest university in the UMass system.[50] UMass Boston offers two programs that lead to a PreK–2 teaching license: the Bachelor of Arts in Early Education and Care in Inclusive Settings program and the Early Childhood Master of Education (MEd) program. The Bachelor of Arts in Early Education and Care in Inclusive Settings program serves anyone with a high school diploma, and candidates range from experienced early childhood educators to military veterans to college candidates entering directly from high school. Both programs are housed in UMass Boston's College of Education and Human Development.[51]

In the 2018–19 school year, UMass Boston graduated five candidates from its BA programs and 13 from its MEd program. In the same school year, out of the 335 candidates enrolled across both of UMass Boston's teacher preparation programs, 43% were White, 12% Black/African American, 11% Hispanic/Latino, 3% Asian, and 2% two or more races. Twenty-nine percent of candidates did not report their race. Among the same population, 61% were female, 21% were male, and 18% did not report their gender.[52]

New Jersey

Demographics of Preschool-Age Children

Over half of New Jersey's children under the age of 5 are children of color (see Table 2).[53] New Jersey's Black or African American and Hispanic or Latino children under age 5 are more likely to live under the federal poverty line (26% and 25%, respectively), compared to those identifying as two or more races (15%), non-Hispanic White (9%), and Asian and Pacific Islander (5%).[54] Almost half of children ages 0 through 8 in New Jersey are dual language learners.[55] There are no publicly available data on New Jersey's ECE workforce demographics.[56]

State Preschool Programs and Enrollment

New Jersey funds three state preschool programs: the Preschool Expansion program, Early Childhood Program Aid, and the Early Launch to Learning Initiative.[57] The largest is the Preschool Expansion program, a scale-up of New Jersey's original Abbott Preschool Program, which provides a full-day program to all 3- and 4-year-olds who live in eligible districts. Early Childhood Program Aid operates in districts in which 20–40% of children met the criteria for free or reduced-price lunch (FRPL) when the program was established in the late 1990s. The Early Launch to Learning Initiative was established as an effort to expand high-quality prekindergarten to all 4-year-olds eligible for FRPL across the state, in addition to the eligible districts under the Preschool Expansion program.

In the 2021–22 school year, 30% of New Jersey's 3-year-olds were enrolled in a public preschool program, with 20% in one of the three public prekindergarten programs, 5% in Head Start, and 5% in special education. Forty percent of 4-year-olds were enrolled in public preschool, with 29% in state-funded prekindergarten, 5% in Head Start, and 6% in special education.[58]

Early Childhood Credentials Offered

New Jersey offers one early childhood teacher credential: preschool through 3rd grade (P–3). In addition, it offers a kindergarten through 6th grade credential.[59] All New Jersey state-funded preschool teachers, in both public and nonpublic settings, are required to have a P–3 credential (see Table 6).[60]

Table 6. New Jersey P–3 Credentialing Requirements

Element	Requirement
Coursework	Completion of BA with major in liberal arts or science, or minimum of 60 liberal arts credits Courses must be aligned with the state's 11 professional standards for teachers and school leaders: • Learner development • Learning differences • Learning environments • Content knowledge • Application of content • Assessment • Planning for instruction • Instructional strategies • Professional learning • Leadership and collaboration • Ethical practice
Assessments	Praxis Core Academic Skills: Reading, Writing, and Math Praxis Early Childhood Education (P–3) Teacher performance assessment (edTPA through 2024; program-determined assessment after 2024)
Clinical experience	50 hours of pre-clinical experience in a preschool setting 2 semesters of supervised clinical experience at the same school site (175 hours in Semester 1; full-time in Semester 2 for 12 weeks

Note: A P–3 credential is required in state-funded PreK in public schools and private or community-based centers.

Sources: New Jersey Administrative Code. §6A:9B; New Jersey Department of Education. *Performance assessment for teacher certification*; New Jersey Department of Education. (2023). Certification Performance Assessment Requirement: Educator Preparation Program Guidance; New Jersey Department of Education. (2021). *Teacher candidate basic skills requirement*.

Early Childhood Credential Requirements

The New Jersey State Board of Examiners requires all P–3 candidates to complete a bachelor's degree with a science or liberal arts major. It does not detail specific courses but does require that teacher preparation programs align their coursework with the state's 11 professional standards for teachers and school leaders.[61]

New Jersey requires P–3 candidates to complete at least 50 hours of field-based learning experiences in preschool settings, followed by at least 2 semesters of full-time supervised clinical practice (see Table 6). Candidates for the P–3 credential must pass their subject area assessment.[62] Through spring 2024, P–3 candidates had to pass the education teacher performance assessment (edTPA), a performance-based, subject-specific assessment. As of fall 2024, educator preparation programs are responsible for determining their own performance assessments.[63]

After completing the requirements, candidates receive a provisional license; they receive their full P–3 license when they complete New Jersey's 2-year teacher induction process, which includes a minimum of 30 weeks of mentorship, two "effective" or "highly effective" ratings from the AchieveNJ observation instrument, and supervision from the employing district or school.[64] New Jersey teachers with an outdated elementary endorsement (preschool through 8th grade) may teach preschool if they taught 2–4 year-olds for at least 2 full-time academic years with their existing certificate.

Preparation Program Approval Process

The New Jersey Department of Education's Office of Recruitment, Preparation, and Certification approves and monitors teacher preparation programs. Preparation programs undergo review every 7 years from the Department of Education, external subject matter experts, the State Program Approval Council, and the commissioner of education.[65]

Montclair State University

Montclair State University (Montclair) was established in 1908 as a 2-year teachers' college in response to growing demand for professionally trained teachers.[66] Since then, Montclair has become an internationally recognized institution for the preparation of high-quality teachers and the improvement of education.[67] In an effort to ensure diversity among its student body, the university's strategic plan, Project Soar 2025, calls for achieving racial and ethnic diversity levels among students that match those of 18- to 24-year-olds in the state.[68]

Montclair has multiple programs that lead to a P–3 teaching credential: Early Childhood Education Bachelor of Arts, Master of Arts in Early Childhood Education, Dual Certification Master of Arts in Early Childhood Education (P–3) and Teacher of Students With Disabilities, and nondegree pathways such as its nondegree Modified Alternate Route P–3 Certification Program and Newark Montclair Urban Teacher Residency. All of these programs are housed in the College for Education and Engaged Learning's Department of Teaching and Learning.[69]

In the 2017–18 school year, 384 Montclair candidates completed either an undergraduate or graduate program leading to teacher certification. Of these, 50 were certified as P–3 teachers. In 2019, 69% of completers of all Montclair teacher preparation programs were White, 10% two or more races, 5% Hispanic/Latino, 6% Asian, 5% Black/African American, and 1% Native Hawaiian or Pacific Islander. Five percent did not report their race. Among the same pool, 76% were female and 24% were male.[70]

Rutgers University–New Brunswick

Rutgers University–New Brunswick (Rutgers), the largest campus of the Rutgers State University of New Jersey system, houses the system's Graduate School of Education.[71] Rutgers offers two early childhood credential programs that lead to a P–3 teaching credential: a 5-year combined Bachelor and Master of Arts Program in Elementary Education and a nondegree Preschool to Grade 3 Endorsement Program for individuals who hold a Standard Certificate or Certificate of Eligibility With Advanced Standing in the state of New Jersey.[72] Both programs are housed in the Department of Learning and Teaching at Rutgers.

Program Graduates

In 2019, 71% of the 225 completers across both Rutgers teacher preparation programs were White, 16% Asian, 6% Hispanic/Latino, 3% Black/African American, and 3% two or more races. Two percent did not report their race. Among the same pool, 72% were female and 27% were male.[73]

New York

Demographics of Preschool-Age Children

Over half of New York's children under the age of 5 are children of color (see Table 2).[74] Thirty-one percent of the state's Black or African American children under age 5 live under the FPL, compared with 24% Hispanic or Latino, 17% two or more races, 15% Asian and Pacific Islander, and 14% non-Hispanic White.[75] More than 4 in 10 New York children ages 0 through 8 are dual language learners.[76] New York has no publicly available data on its early childhood workforce demographics.[77]

State Preschool Programs and Enrollment

New York State began its Universal Prekindergarten Program in 1998 with the goal of making prekindergarten available to all 4-year-olds in the state. The state began creating slots for both 3- and 4-year-olds in 2015.

In 2022–23, 26% of the state's 3-year-olds attended a public preschool program, with 16% in state preschool, 6% in Head Start, and 4% in special education. Sixty percent of 4-year-olds were enrolled in a public preschool program, with over half (52%) in state-funded universal prekindergarten, 5% in Head Start, and 3% in special education.[78]

Additionally, the New York City Department of Education implemented citywide universal preschool for all 4-year-olds in 2014 and began expanding the program to 3-year-olds in 2017, resulting in a significant increase in the demand for early childhood credentialed teachers.

Early Childhood Credentials Offered

New York offers one early childhood credential that covers birth through 2nd grade (B–2) and an elementary education credential (referred to as "childhood education") that covers 1st through 6th grade.[79] State-funded public preschool and public kindergarten teachers are required to obtain a B–2 credential (see Table 7).[80]

Table 7. New York B–2 Credentialing Requirements

Element	Requirement
Coursework	Completion of 13 general pedagogical core requirements: • Typical human developmental processes and variations • Learning processes • Needs of students with disabilities • Language acquisition and literacy development • Curriculum development and instructional planning • Use of technology • Assessment • History and philosophy of education • Methods of updating pedagogical knowledge • Ethical responsibilities in identifying, instructing, reporting on harm to students Completion of program-specific content and pedagogy requirements: • Early childhood development, learning experiences, and assessments • Early childhood curriculum development and implementation • Methods for literacy instruction for native English students and students who are English language learners
Assessments	New York Teacher Certification Examinations (NYSTCE) Educating All Students NYSTCE Multi-Subject: Teachers of Early Childhood (Birth–Grade 2) teacher preparation program-administered performance assessment
Clinical experience	100 hours of field experience prior to student teaching 70 days of full-time supervised clinical practicum experience (new requirement in 2024)

Note: A B–2 credential is required of all teachers in state-funded PreK in public schools. It is not required of teachers in state-funded PreK in private or community-based centers.

Sources: New York State Education Department. (n.d.). *General and program specific requirements for early childhood education teacher certification*; New York State Education Department. (n.d.). *Certification test requirements*.

Early Childhood Credential Requirements

New York outlines content, pedagogical, and program-specific requirements for registered teacher preparation programs leading to ECE certification, including field experiences, student teaching, and practica (see Table 7). At the time of study, candidates were expected to meet competencies in 10 pedagogical core areas, have at least 100 hours of field experience related to coursework prior to student teaching, and have a student-teaching placement of at least 40 days. Candidates who enter a program in fall 2024 or later need to complete a student teaching or practicum experience that is at least 70 days.[81]

B–2 candidates must pass the New York State Teacher Certification Examinations Multi-Subject: Teachers of Early Childhood and Educating All Students exams. New teachers who hold an Initial certificate must earn a master's degree and complete at least 3 school years of full-time teaching experience to receive their Professional B–2 certificate.[82] To add a B–2 credential to other teaching certificates, candidates must hold an Initial, Professional, or Permanent certification; complete content and pedagogical coursework (including ECE coursework); and pass the New York State Teacher Certification Examinations Multi-Subject: Teachers of Early Childhood (Birth–2) exam.

Preparation Program Approval Process

The New York State Education Department Office of College and University Evaluation accredits teacher preparation programs, ensuring that they follow the required minimum content core, pedagogical core, program-specific core, and clinical experience requirements.[83] After approval, programs must maintain accreditation through the Council for the Accreditation of Educator Preparation or the Association for Advancing Quality in Educator Preparation (which includes annual reports and must be renewed every 7 years).

Bank Street Graduate School of Education

Bank Street Graduate School of Education (Bank Street) is located on the Upper West Side of New York City. Bank Street was originally founded as the Bureau of Educational Experiments in 1916 and has since remained committed to research and training in the realm of childhood education spanning birth to adolescence, providing exclusively graduate-level educator and leader preparation programs.[84] Many of Bank Street's Early Childhood Education teacher candidates are career changers, or they have some experience working in community-based child care centers.[85]

Bank Street offers a variety of Master of Science in Education programs in Early Childhood Education that lead to a B–2 certification, including programs focused on general and special education, dual language/bilingual education, and infant and family development.[86]

During the 2020–21 school year, Bank Street graduated 49 candidates across all its Early Childhood Education and Teaching master's degree programs.[87] As of fall 2022, among the 683 enrolled candidates across all of Bank Street's programs, 51% were White, 15% Hispanic/Latino, 19% Black/African American, 7% race unknown, 5% Asian, and 3% two or more races. The same candidates were 86% female and 14% male.[88]

The City College of New York

The City College of New York (CCNY), one campus of the City University of New York (CUNY) system, is located in Harlem in New York City. Founded in 1921, CCNY has a historic mission of access and excellence, which it strives to achieve by recruiting a student body that mirrors the diversity of its New York City neighborhoods.[89]

CCNY has a Bachelor of Science in Early Childhood Education program and six Master of Education programs in ECE that lead to a B–2 certification.[90] The bachelor's degree program is housed in CCNY's Center for Worker Education, while the master's degree programs are housed in its School of Education.

During the 2021–22 school year, CCNY graduated 27 bachelor's candidates and 31 master's candidates across all of its early childhood education and teaching programs.[91] In fall 2021, 91% of CCNY's ECE preparation program candidates (baccalaureate and postbaccalaureate) identified as either Black/African American, Hispanic/Latino, Asian, or two or more races; 9% identified as White; and 0% identified as Native American, Native Hawaiian, or Native Alaskan; 94% were female and 6% were male.[92]

State Early Childhood Credentialing Choices

This section discusses the decisions policymakers in Louisiana, Massachusetts, New Jersey, and New York made regarding credential grade span, course content, clinical experience, and assessment requirements.

Grade Span

While there is general consensus that educators need specific skills and knowledge to work with young children, there is not consensus around the grade and age bands to include within a credential.[93] Among the four states in this study, three unique age ranges are represented in the credentials: preschool through 3rd grade (which some states refer to as either P–3 or PreK–3), preschool through 2nd grade (P–2 or PreK–2), and birth through 2nd grade (B–2). We summarize in this section the reasoning behind the particular grade ranges selected by these four states.

While there is general consensus that educators need specific skills and knowledge to work with young children, there is not consensus around the grade and age bands to include within a credential.

When choosing an early childhood credential grade span, states considered a variety of factors, such as national and state contexts, content coverage, and labor market flexibility. In 2016, Louisiana adopted a PreK–3 credential to match national initiatives related to preschool to 3rd-grade alignment and specialization.[94] The new PreK–3 credential also coincided with the state's shift toward incorporating a competency-based model to guide preparation programs in addition to specific course requirements.[95] Prior to 2016, the state offered only birth–kindergarten (B–K) and 1st–5th (1–5) grade credentials. Relatively few educators were attracted to earning a B–K license. In 2019, only eight educators held a B–K credential, while there were 5,673 educators with a PreK–3 credential and 7,734 educators with a 1–5 credential. The B–K credential was not in demand primarily because it was not required in infant and toddler settings. Additionally, candidates may have preferred the PreK–3 age span for its flexibility; PreK–3 credential holders would be able to teach across a broader set of grades while still focusing on young children.

In Massachusetts, the early childhood credential grade span was shortened from a PreK–3 to a PreK–2 credential due to concerns about content.[96] State administrators believed the PreK–3 credential preparation did not adequately cover 3rd-grade content; specifically, they were concerned that the previous credential did not prepare teachers to teach the math standards that were used to assess children beginning in 3rd grade. Reducing the early childhood credential grade span saved candidates from having to take additional math tests that would have been required for teachers credentialed to cover 3rd-grade math content. The state also considered developing a birth to 2nd grade (B–2) credential; however, it did not come to fruition because the Department of Early Education and Care oversees credentials required for child care programs, and the Department of Elementary and Secondary Education oversees teacher licenses for public preschool and later grades. A B–2 teacher license would overlap the two departments and thus create administrative difficulties.

New Jersey established the P–3 credential in 2000 to comply with the *Abbott v. Burke* mandate, which expanded universal preschool for 3- and 4-year-olds in 31 of the state's poorest districts. Because policymakers believed training teachers for these grade levels was an effective strategy for raising achievement levels of at-risk students, *Abbott v. Burke* required all preschool teachers in Abbott districts to hold both a bachelor's degree and P–3 credential. (See Implementation of New Jersey's P–3 Credential.)

In 2004, New York updated its elementary teaching credential, which covered preschool to 6th grade, to create an early childhood–focused credential for birth to grade 2 (when most children turn eight) and a middle childhood–focused credential to cover grades 1–6. This shift was a result of a state analysis that identified key areas for improvement to meet higher teaching and learning standards. The state's culminating report highlighted the need to prepare educators with the skills and content knowledge necessary to teach children in distinct developmental levels, and preschool to 6th grade was considered too wide a developmental span.[97]

Implementation of New Jersey's P–3 Credential

In 2002 when the New Jersey Commission on Higher Education established a new PreK–3rd grade teaching credential (as mandated by the *Abbott v. Burke* court ruling), it collaborated with institutions of higher education (IHEs) to rapidly create credential programs. State administrators met with representatives of the IHEs to learn about their capacity to implement the new credential in order to determine the set of supports and incentives the IHEs needed.

New Jersey provided one-time funding of $13 million (the equivalent of over $21 million in 2022) to create two competitive grant programs for higher education capacity building: (1) Teacher Quality and Capacity Grants, and (2) Teacher Effectiveness Grants for preschool and K–12 teacher preparation. Grants were used to expand credentialing programs and hire faculty in areas of need, allowing colleges to greatly increase their early childhood education faculty. Fifty-two new faculty positions were created with grant funds and later built into universities' base grants for ongoing state funding; additional positions were created with college and university funds. The grants also helped some universities, including Montclair State University, build relationships with Abbott districts and gave IHE faculty the opportunity to participate in professional development.

With the increased qualification requirement for lead public preschool teachers to earn their PreK–3 certification, the court mandated pay parity with K–12 lead teachers. Pay parity was a critical incentive to attract and retain educators who otherwise might leave either leave public preschool rather than complete their credential or move to better-paying K–12 positions once they earned their credential. While pay parity incentivized teachers to remain in public preschool, state officials noted that some centers stopped offering infant and toddler care in favor of providing more public preschool classrooms to receive the higher preschool reimbursement rates, negatively impacting the availability of infant and toddler care.

Tonya Coston, former Deputy Assistant Commissioner for the Division of Early Childhood Education at the New Jersey Department of Education, explained that focusing on improving one part of the system and increasing reimbursement rates for just preschool without considering the entire intertwined system of early care and education can have unintended negative consequences:

> As soon as you upgrade salaries and put more money into preschool [and] you don't do something for infant/toddler [care], you are going to have a crisis of quality infant/toddler care on your hands, because as a teacher, if I can go be an assistant [teacher] in a preschool classroom and make more money than being the head teacher in an infant/toddler [classroom], that's what I'm probably going to do.

Sources: Adapted from Gardner, M., Melnick, H., Meloy, B., & Barajas, J. (2019). *Promising models for preparing a diverse, high-quality early childhood workforce*. Learning Policy Institute; Interview with Tonya Coston, former Deputy Assistant Commissioner for the Division of Early Childhood Education at the New Jersey Department of Education (2022, March 3); Interview with Tonya Coston, Deputy Assistant Commissioner for the Division of Early Childhood Education at the New Jersey Department of Education (2022, February 2).

Final decisions about grade spans were not made without debate. For example, not all stakeholders were on board with eliminating 3rd grade from the early childhood credential in Massachusetts. State administrators reported that school and district staff preferred the wider, more flexible grade span. In contrast, educator preparation program staff in Massachusetts favored a shorter grade span that enables teacher candidates to gain specific expertise in child development and working with young children. Elizabeth Losee, Director of Educator Effectiveness Policy at the Massachusetts Department of Elementary and Secondary Education, summarized the dilemma:

> It's always sort of this fine line of both wanting to have a structure that allows somebody to serve in different roles with that license but at the same time make sure that their preparation and knowledge isn't too wide that they don't have the expertise that they need to be effective.[98]

New York State Education Department administrators also described this tension between allowing greater labor market flexibility with a longer age range and maintaining the quality of preparation and specialization by focusing on the early years. One interviewee noted the delicate balance between the expertise teachers need to be successful in positions and the practical side of how school leaders staff schools, especially given a teacher shortage.[99]

Several interviewees from the states' education departments mentioned that school and district leaders prefer to hire educators with an elementary license because educators with this license can teach in more grades, offering flexibility to fill positions within a school. As a result, some administrators worry that there is a disincentive for educator candidates to pursue an early childhood–specific credential. Despite this perception, state data show that early childhood credentials are popular overall. For example, although New Jersey issued more elementary credentials (1,827) than early childhood credentials in 2018–19, it still created well over 500 newly credentialed early childhood teachers.[100] (See Table 8.) Data also show that early childhood and elementary credential holders are teaching in various settings and grades, such as child care centers, preschool, and K–12.

In interviews, preparation program staff stressed the importance of expertise in early child development. For example, Sherry Cleary, former Dean for Early Childhood Initiatives at the City University of New York and Executive Director of CUNY's New York Early Childhood Professional Development Institute, mentioned the importance of specialized knowledge in teaching children in their first 8 years of life: "[You need someone who] knows how to teach reading, how to be diagnostic, how to understand behavior and understand the role of families."[101]

Table 8. Number of Early Childhood and Elementary Credential Holders, by State

State and credential types	Number of early childhood credential holders	Number of elementary credential holders
Louisiana (PreK–3 and 1–5)	5,673	7,734
Massachusetts (PreK–2 and 1–6)	12,256	54,092
New Jersey (P–3 and K–6)	545	1,827
New York (B–2 and 1–6)	127,906	277,668

Note: Data for Louisiana and New Jersey are from 2018-19; data for Massachusetts and New York are from 2019–20. Individuals with multiple credentials may be counted more than once. Data do not include Louisiana's B–5 credential.

Source: Learning Policy Institute analysis of credential data provided by Louisiana Department of Education, Massachusetts Department of Education, New Jersey Department of Education, and New York State Education Department.

Interviewees from credential programs also reported that school leaders saw the value in hiring educators with specialized expertise in early childhood. At the City University of New York, preparation program administrators train their educator candidates to explain the need for their specialized ECE knowledge and skill set. "We've trained them to say, 'You want me in your building because I have a special skill set, and the first 8 years of life are the most critical, and you want me in that room.' It's pretty hard [for principals] to say 'No, we're not interested in any of that,'" said Cleary. Program administrators at Montclair State University also mentioned that candidates often want to focus on the early elementary grades and intentionally pursue the early childhood credential to avoid being placed in later grades.

Interviewees from preparation programs pointed out that principals also need knowledge of the fundamentals of early childhood teaching practice so they can effectively support the continued professional learning of early childhood educators once they enter the classroom. Principals' ability to create positive working conditions and supportive, collaborative learning environments plays a critical role in attracting and retaining qualified teachers and developing their skills.[102] (See Principal Preparation to Support Early Childhood Educators for additional details about state efforts to support principals.)

Principal Preparation to Support Early Childhood Educators

The presence of well-prepared, informed principals is becoming more important as preschool expands and is increasingly integrated into elementary schools. Illinois, however, is the only state that includes any type of ECE background (e.g., teaching experience, inclusion in curriculum) in its principal licensure and accreditation standards.

In the absence of ECE requirements, a more common method of supporting elementary school administrators is principal professional development and support networks. Massachusetts and New Jersey have found that creating networks for principal support and information sharing is a useful way of equipping principals to support educator preparation programs, newly inducted early childhood educators, and existing school faculty and staff.

Massachusetts

During the 2021–22 school year, the Center for Leadership and Educational Equity, in collaboration with the Massachusetts Department of Elementary and Secondary Education and the Principal Readiness Advisory Council, convened a network of principals who were supporting early childhood educators as part of their roles, as well as faculty and leaders from administrative leadership programs across the state. The network, led by the Center for Leadership and Educational Equity, met for a total of six virtual sessions, with drop-in coaching opportunities. The content of the sessions primarily focused on principal and assistant principal preparation, including designing field-based experiences that provide opportunities to practice the revised Indicators for the Massachusetts Standards of Effective Administrative Leadership; using performance assessment to understand candidates' demonstration of the revised Indicators; and supporting supervisors so they can effectively provide feedback and evaluate candidate practice. Elizabeth Losee, Director of Educator Effectiveness Policy at the Massachusetts Department of Elementary and Secondary Education, described the work undertaken during the network sessions:

> Network sessions provided collaborative space for participants to focus on key program revisions, including designing field-based experiences that provide opportunities to practice the revised indicators, using a performance assessment to understand candidates' demonstration of the revised indicators, and supporting supervisors to effectively provide feedback and evaluate candidate practice.

New Jersey

In fall 2009, representatives from Advocates for Children of New Jersey, the New Jersey Department of Education, the Division of Early Childhood Education, and the New Jersey Principals and Supervisors Association came together to host a series of 4-day sessions titled "PreK–3rd Leadership Training Series." These sessions took place over a 5-month period and were intended to "[provide] administrators with research, strategies, and techniques to effectively implement high-quality preschool through 3rd-grade programs and assist them in evaluating those programs, as they successfully lead their instructional staff."[103] The specific sessions were based on the nine components of a PreK–3rd system alignment developed by Kristie Kauerz, Executive Director of the National P–3 Center: access to programs, teacher/teaching quality, program quality, leader quality,

whole child learning standards, child-based assessments, transitions, infrastructure, and family and community engagement. In order to maximize the number of participants, program staff offered the sessions in four locations (two in South, one in North, and one in Central New Jersey). In total, approximately 200 district administrators from across the state participated.

Similarly, in 2013, the National Institute for Early Education Research at Rutgers, the Center for Enhancing Early Learning Outcomes, and the New Jersey Department of Education created the Early Childhood Academy (EC Academy) professional learning community. The EC Academy offered voluntary in-service professional education to district teams with a specific emphasis on aligning PreK through 3rd-grade learning. District teams included at least one administrator from the central office, a building administrator, and an early childhood teacher.

The intended impact of the EC Academy was that "participants would have a more comprehensive understanding and a cohesive implementation of key reforms or initiatives in a developmentally appropriate manner at the early childhood level."[104] Meetings included updates from the executive director of the Race to the Top-Early Learning Challenge in the New Jersey Department of Education, as well as formal presentations by experts in the field. Presentations ranged from "Improving ECE Teaching Practice Using State Teacher Evaluation Systems" to "Assessment and Dual Language Learners." In addition to expanding principals' knowledge of ECE practices and statewide ECE reforms, the EC Academy supported improved relationships between participating local education agencies and the New Jersey Department of Education, as well as between districts.

Sources: Szekely, A. (2013). *Leading for early success: Building school principals' capacity to lead high-quality early education*. National Governors Association; Personal email with Elizabeth Losee, Director of Educator Effectiveness Policy, Massachusetts Department of Elementary and Secondary Education (2023, February 8); Kagan, S., & Kauerz, K. (2012). *Early childhood systems: Transforming early learning*. Teachers College Press; Rice, C., & Costanza, V. (2011). *Building early learning leaders: New Jersey's PreK–3rd leadership training: A case study*. Advocates for Children of New Jersey; Riley-Ayers, S., & Costanza, V. (2014). *Professional learning academy: Supporting district implementation of early childhood policy* [fastFACT brief]. Center on Enhancing Early Learning Outcomes.

Content Requirements

States need to determine *what* teachers of young children need to know and be able to do. They also need to determine *how* to ensure specified content coverage. There is a fair amount of consensus on what teachers of young children need to know and be able to do. This includes:

- knowledge of typical child development and how to recognize and effectively educate children with special needs;
- ability to create a safe, caring environment and establish positive relationships with all children;
- ability to ensure a predictable learning environment that is engaging to children, minimizes disruption, and maximizes productive learning;
- knowledge and pedagogical skills needed to support children's development in all domains—physical-motor, social-emotional, and cognitive (including executive functions), and in core academic subjects, especially language, literacy, and math;

- ability to establish productive partnerships with parents and incorporate children's culture into their classroom; and
- skills for ensuring that dual language learners have access to all aspects of the program and opportunities to develop language skills, preferably in both English and their primary language.[105]

While there may be consensus in the research about the knowledge and skills necessary for early childhood educators, these features are not clearly present in all states' licensing systems, including those we studied. States primarily use two strategies to ensure that credential programs prepare candidates with the set of knowledge and skills they deem important. They either require certain courses or require accredited programs to demonstrate that they effectively cover skills articulated in professional standards for teachers. Assessments required to obtain the credential both guide program decisions about content and ensure that candidates have met the standards (see Assessment Requirements).

Some states only specify the number of units in each content area without further specification. For example, Louisiana requires 33 hours of ECE courses plus 15 hours of pedagogical coursework, but credential programs determine the specific knowledge and skills to cover. Massachusetts requires credential programs to follow subject matter knowledge guidelines and professional standards for teachers and leaders that align with the state's learning standards for students. The state specifies that coursework covers subject matter in the curriculum frameworks in English language arts/literacy, math, science and technology/engineering, and history and social science. Additionally, Massachusetts outlines guidelines with detailed indicators for preparation programs to ensure teachers meet the following professional standards: curriculum, planning and assessment, teaching all students, family and community engagement, and professional culture.[106]

Similar to Massachusetts, New Jersey requires teacher credential programs to align their coursework with the state's 11 professional standards for teachers but does not specify courses. New Jersey's professional standards cover knowledge and skills across learner development, learning differences, learning environments, content knowledge, application of content, assessment, planning for instruction, instructional strategies, professional learning, leadership and collaboration, and ethical practice.[107]

New York specifies two sets of pedagogical core requirements for early childhood candidates: General pedagogical core requirements cover knowledge and skills expected of teacher candidates seeking certification in any grade level or subject area, while program-specific core requirements specify early childhood knowledge and skills.[108] The 10 general pedagogical core requirements require preparation programs to include typical human developmental processes and variations, learning processes, needs of students with disabilities, language acquisition and literacy development, curriculum development and instructional planning, use of technology, assessment, the history and philosophy of education, methods of updating pedagogical knowledge, and ethical responsibilities in identifying, instructing, and reporting on harm to students. New York's early childhood pedagogical core requirements ensure programs include child development, learning experiences and assessment specific to early childhood, early childhood curriculum development and implementation, and literacy instruction.

Coursework that overlaps with other early childhood certifications can fulfill some coursework requirements for educators working toward their early childhood credential. Most states also have other early childhood certifications (such as child development associate certification or permits) that include

some course requirements for staff working in licensed early care and education settings who perform various roles related to the care and education of young children. For example, some states require those who work as lead teachers in center-based child care or as classroom aides to have 12 or more credits in early childhood coursework. Earning an early childhood teaching credential could warrant an advancement in pay and responsibility for people working in these roles.

Articulation of course requirements between teaching credentials and other early childhood certifications can make advanced degrees more accessible. At Northwestern State, for example, a degree in Child and Family Studies, which can be completed online, leads to certification for working in early childhood care settings such as Head Start or daycare. Administrators express the hope that candidates who complete that program will transition into the school's MAT in Early Childhood credential program.

Articulation of course requirements between teaching credentials and other early childhood certifications makes the advanced degrees more accessible for those who aspire to them.

Overall, Louisiana stands out for requiring specific hours of early childhood education coursework (33) and pedagogy coursework (15) but otherwise leaving it up to preparation programs to determine coverage of specific content and subject areas. This approach allows preparation programs more flexibility but offers less assurance that early childhood teachers will be prepared across all the important topics they should cover. Massachusetts, New Jersey, and New York align their content with state learning standards, but the standards lack emphasis in one or more of the key areas across the entire credential grade span, like math or partnerships with families.

Clinical Requirements

Clinical experience includes supervised clinical placements (i.e., student teaching) as well as field-based learning experiences integrated into candidates' coursework (i.e., pre-practicum). Clinical experience is essential for high-quality teacher preparation. Clinical experiences are most effective when they are supervised and sustained; candidates have opportunities to connect hands-on practice to knowledge developed through preparation program courses; and when they have multiple opportunities to receive feedback and apply their learning in practice.[109]

The four states studied had different clinical requirements regarding the amount of time, experience in specific grade levels and settings, field-based learning experiences during or prior to supervised clinical placements, and credit granted for previous experience. Clinical experience requirements for each state are shown in Table 9.

Of the four states studied, Louisiana's state credentialing system has the most robust clinical experience requirement (full-time for 1 full school year), which is called a residency year and is built into a 4-year undergraduate program. Louisiana provides a small stipend during the yearlong clinical experience but does not provide sufficient financial support for living expenses, considered by experts to be a key characteristic of strong teacher residencies.[110] However, since the Louisiana residency year is incorporated at the undergraduate baccalaureate level, this may be less of a hardship than it would be for candidates completing their clinical experience in a postgraduate year, which requires another year

of tuition and living expenses. Although Louisiana's residency does not meet the full financial support components of strong teacher residency models, it does include other characteristics of strong clinical learning, including a full-year residency teaching alongside expert mentor teachers and the residency year as a vehicle to recruit teachers for high-need districts and schools.

New Jersey falls in the middle. Like Louisiana, it requires 2 semesters of clinical experience, with a minimum of 175 hours in the first semester and full-time in the second semester for 12 weeks. Massachusetts requires a minimum of 1 semester, while New York requires 70 days and an additional 100 hours of field-based learning experience related to coursework.

Among study states, Louisiana is the only state that does not require clinical experience in multiple grade spans or settings. Massachusetts requires two different grade spans (PreK–K and 1st–2nd), and New Jersey requires two settings, one of which must include children with disabilities. New York's requirements are even more extensive, requiring a combination of field-based learning experience and supervised clinical placements covering three grade spans: PreK, K, and grades 1 and 2.

Table 9. Study States' Clinical Experience Requirements

State	Min. time for supervised clinical placement	Grade level and settings	Pre-practicum field-based learning experiences	Other requirements
Louisiana (PreK–3)	Full-time for 1 school year	One classroom setting	Required; length not specified	Placements must be with a teacher of record who holds a valid teaching certificate in the area for which the candidate is pursuing certification.
Massachusetts (PreK–2)	1 semester (300 hours)	PreK–K (100 hours); 1st or 2nd (200 hours)	Required length not specified; must address the Professional Standards for Teachers and Subject Matter Knowledge requirements	Placements must be in a school that requires a teacher to be licensed. At least one setting must include children with disabilities.
New Jersey (P–3)	2 semesters (175 hours in Semester 1; Full-time in Semester 2 for 12 weeks)	Must be in at least two different classroom settings	50 hours	Placements must occur at one school, where possible. At least one setting must include students with disabilities.

State	Min. time for supervised clinical placement	Grade level and settings	Pre-practicum field-based learning experiences	Other requirements
New York (B–2)	70 days[a]	The combined field-based learning experiences and supervised clinical placement must include experiences in three grade spans: PreK, K, AND 1st or 2nd grade.	100 hours related to coursework (15 of which involve working with students with disabilities)	The mentoring teacher of record must hold a B–2 certificate AND be designated by the school or district as a teacher mentor or coach OR be rated "effective" or "highly effective" in their most recent annual professional performance review OR hold National Board Certification.

[a] For candidates who enter a teacher preparation program in 2024 or later.

Source: Analysis of state and institutions of higher education clinical experience requirements by the Learning Policy Institute. (2022).

Some candidates earning their early childhood teaching credential have prior experience teaching in ECE settings. Giving those candidates with prior experience ways to demonstrate their competencies and allowing them to count some prior experience in clinical experience requirements are ways some states honor the experience that candidates bring and reduce barriers to certification. Two of the states, Massachusetts and New York, have state-level policies to credit portions of the clinical experience requirements based on prior classroom experience. Massachusetts allows preparation programs to count previous classroom teaching experience for up to half of the required clinical hours (150 of the 300 hours). In New York, all but 50 hours of student teaching or practica are exempt if the candidate meets one of the following three criteria: (1) completed a registered preparation program prior to enrollment and holds an Initial certificate and/or Professional certificate (in another teaching area), (2) is National Board Certified, or (3) has at least 1 year of effective teaching experience under a valid New York or out-of-state license or certificate.

Assessment Requirements

State credentialing assessments, including exams and performance assessments, are intended to assess educator candidates' knowledge of content and readiness to be effective in the classroom. To receive a teaching credential, candidates in all four states are required to pass exams testing content that spans the grade levels covered by the credential. Because early childhood credentials span PreK and early elementary grades, candidates are assessed on their knowledge of the content of both (see Table 10).

Some states, including Massachusetts and New Jersey, also use performance assessments to evaluate candidates' readiness to teach as part of certification, and others, like New York, require teacher preparation programs to incorporate a performance assessment as part of the program. Teacher performance assessments evaluate candidates' performance during clinical experiences and are designed to evaluate candidates' readiness for teaching in a way that is more authentic than other tests.

They typically require teaching candidates to develop portfolios of work that include unit plans, videos of their instruction, evaluations of student work, and written reflections that connect their teaching practice to theory of best practices learned in coursework.[111]

Both state and preparation program interviewees identified exams as a common barrier for candidates, particularly candidates from socioeconomically disadvantaged backgrounds and non-native English speakers. Research has also found that Black and Latino teacher candidates have disproportionately failed a number of these standardized exams in many states.[112] Interviewees from all four states reported that credentialing exams can be a barrier for several reasons. First, the format of exams and type and amount of content covered can be difficult for teacher candidates who did not have a strong academic background before entering the credential program. Further, preparation program interviewees in Massachusetts reported that the exam focused more on content related to 1st and 2nd grade than on content covering PreK and K.[113]

Interviewees from New York's preparation programs expressed concern that their Multi-Subject test requires content knowledge at the high school and college levels in math rather than on how the foundations of math are presented to young children.[114] Their concerns suggest the value of scrutinizing state tests to make sure that the content covered is genuinely relevant to teaching young children.

Table 10. States' Early Childhood Teacher Certification Assessment Requirements

State	Performance assessment	Exams
Louisiana	N/A	**Content and pedagogy** • Praxis Elementary Education Exam: Multiple Subject (reading and language arts, math, social studies, science) • Praxis Principles of Learning and Teaching Exam: Early Childhood
Massachusetts	Massachusetts Candidate Assessment of Performance	**Core academic skills** • Massachusetts Tests for Educator Licensure (MTELs): Communication and Literacy Skills **Content and pedagogy** • MTEL: Early Childhood • MTEL: Foundations of Reading
New Jersey	Early childhood education teacher performance assessment (edTPA)[a]	**Core academic skills** • Praxis Core Academic Skills: Reading, Writing, and Math[b] • Praxis Early Childhood Education (P–3)

State	Performance assessment	Exams
New York	Teacher preparation program–administered performance assessment	**Content and pedagogy** • New York State Teacher Certification Examinations (NYSTCE) Educating All Students • NYSTCE Multi-Subject: Teachers of Early Childhood (Birth–Grade 2)

[a] As of spring 2024, candidates are not required to take the edTPA; New Jersey educator preparation programs will be responsible for determining the performance assessment they will use for program completion and credential obtainment.

[b] Exam requirements vary by pathway to certification. The information in this table represents requirements for an individual who is pursuing an early childhood teaching credential at a bachelor's-granting institution.

Sources: Louisiana State Board of Elementary and Secondary Education. (n.d.). *Policies/bulletins* [Bulletin 745, Bulletin 996]; Massachusetts Department of Elementary and Secondary Education. (n.d.). *Subject matter test requirements*; Massachusetts Department of Elementary and Secondary Education. (n.d.). *Candidate Assessment of Performance (CAP)*; New Jersey Department of Education. (n.d.). *Certification: Teachers* (accessed 01/13/2025); New Jersey Department of Education. (2023). *Certification performance assessment requirement: Educator preparation program guidance*; New Jersey Department of Education. (2021). *Teacher candidate basic skills requirement*; New York State Education Department. (n.d.). *Certification test requirements*.

A second barrier presented by teacher licensure exams is their cost, which ranges from $80 to $300 each. The cost can be particularly burdensome to candidates with low incomes. Some candidates may have to pay to take multiple exams, pay to retake exams, and/or pay for preparation materials.

Language is a third common barrier imposed by exams for candidates whose first language is not English. A preparation program administrator at UMass Boston mentioned that several of their native Spanish-speaking teacher candidates who want to teach in bilingual programs have difficulty passing the state-required exams because they are written in English.[115] Research suggests that more authentic performance assessments that directly measure teaching skills are more closely related to teachers' work and show fewer disparities in performance for teachers of color.[116]

In response to these barriers and to make teacher credentials more accessible for teacher candidates from diverse backgrounds, some states are making efforts to improve exams. Massachusetts, for example, has several initiatives to help candidates meet test requirements. In 2020, the state began a 4-year pilot of alternative assessments for the required core skills and subject matter tests.[117] The alternative assessments were less expensive, shorter, and tended to include more open-ended or essay questions than the Massachusetts Tests for Educator Licensure (MTELs). The pilot program aimed to address "licensure practices and other strategies to promote entry into the profession and retention for individuals of color, based on compelling data, research, and feedback from the field."[118] All candidates can take an alternative assessment, approved by the department, in place of the MTEL.[119]

Massachusetts approved four educator preparation programs to pilot alternative assessments for subject matter pedagogical tests.[120] Three of these preparation programs offered an alternative assessment in place of the Foundations of Reading exam. Preparation programs could assess candidates' subject matter knowledge through other means—such as essays, written tests, and work products or experiences—that

align with the state's learning standards for students.[121] The state also offers an MTEL-Flex assessment option for candidates who have a score just below the passing score.[122] The MTEL-Flex option allows eligible candidates to retake a portion of the content area test instead of retaking the entire exam.

New York revised its licensure performance assessment requirement in 2022 to shift from an externally administered performance assessment, the edTPA, to an internal program-administered or program-developed teacher performance assessment that is integrated into a candidate's student teaching or practicum. The state requires the program to design an assessment that promotes candidates' professional growth using multiple measures and that is aligned with the New York State Teaching Standards for the grade band of the credential.[123] New York's shift from an externally administered performance assessment to a preparation program–developed performance assessment was intended to reduce costs and barriers for candidates.[124]

In summary, the four states—Louisiana, Massachusetts, New Jersey, and New York—demonstrate both similarities and key differences in their approaches to early childhood teaching credentials. While they all prioritize specialized preparation for teaching young children, they differ in the grade spans covered, clinical experience requirements, and assessments. For example, Louisiana and New Jersey use a PreK–3 model, Massachusetts shortened its span to PreK–2, and New York focuses on birth through 2nd grade.

In terms of content requirements, some states do not require or explicitly address each of the areas that teachers of young children need to know and be able to do. Regardless of whether states choose to require certain courses or to require accredited programs to demonstrate that they effectively cover skills articulated in professional standards for teachers, either approach should encourage or require knowledge and skills in all areas, including social-emotional development and math.

For clinical requirements, Louisiana stands out for its full-year clinical placement in baccalaureate programs, while other states, such as Massachusetts and New Jersey, require shorter placements with a focus on diverse grade spans and settings. Assessment requirements also vary, with some states focusing on traditional content exams, while others, like New Jersey and New York, incorporate performance-based assessments to evaluate candidates' readiness for the classroom.

Preparation Program Design Choices

This section discusses the choices reflected in the design of the early childhood teaching preparation programs at the eight institutions studied—LA Tech, Northwestern State, Boston College, UMass Boston, Montclair, Rutgers, Bank Street, and CCNY.

All four states studied articulate the knowledge and skills expected of credentialed early childhood teachers around which preparation programs need to be designed. Across the states and teacher preparation programs studied, 10 topics were consistently identified as important for early childhood teachers to know and be able to apply, and these guided our examination of preparation programs coursework:

1. Learning and development, including specialized expertise in the early childhood ages covered by the credential
2. Developmentally appropriate pedagogy (teaching grounded both in the research on how young children develop and learn across all domains of development and in what is known about effective early education)[125]
3. Best practices for working with learners with different needs and backgrounds, including dual language learners and children with special needs
4. Literacy teaching methods
5. Math teaching methods
6. Language development
7. Curriculum design
8. Observation and assessment
9. Social-emotional learning and development
10. Role of culture, communities, and families

Research on exemplary preparation programs has also highlighted several program practices and structures that support high-quality preparation:[126]

- Opportunities for candidates to reflect on their own thinking, practices, and missteps to allow them to grow as professionals and develop habits of mind for lifelong learning.
- A cohesive curriculum that purposefully revisits concepts in multiple courses and clinical contexts to deepen candidates' understanding and reinforce learning.
- Integration of some topics—such as developmentally appropriate pedagogy, working with learners with different backgrounds and needs, observation, and assessment—into subject matter methods courses to allow candidates to develop effective teaching strategies directly related to specific subject matter.

- Clinical experiences that are closely aligned with coursework, including applications of theory to practice, to reinforce candidates' learning and help them see the practical implications of theory.
- Early field-based learning experiences to provide opportunities for inexperienced candidates to make sense of and apply the concepts they learn in their coursework. Because many early childhood educators have classroom experience prior to enrolling in formal preparation programs, programs can honor their funds of knowledge and accelerate their program completion by offering some form of credit for that prior experience.
- Carefully structured, extended supervised clinical experiences, which afford candidates ample opportunities to observe, apply, practice, and synthesize concepts and strategies that they learn through their courses.
- Close collaboration with LEAs and other field-based partners (e.g., Head Start and community-based programs) to help ensure quality in field-based learning experiences and supervised clinical placements and to create consistency between what candidates learn in their coursework and what they experience in the classrooms in which they are placed.
- Expert mentor teachers who provide modeling, daily feedback, and coaching in real time.

The following sections discuss how the focal programs have operationalized these foundations of exemplary teacher preparation. We describe this variation in more detail in the sections noting particular strengths and potential weaknesses in the design of the programs studied.

Designing Coursework

An analysis of the course requirements of the eight credential programs studied revealed significant variation in institutional decisions about the departments in which required credential courses were taken, how programs organize course content, and the topics covered.

Institutional Location of Courses

One important institutional decision is whether to offer courses in a single school, college, or department (usually education) versus across school and department boundaries.

One important institutional decision is whether to offer courses in a single school, college, or department, versus across school and department boundaries. These topics are often taught in departments of psychology, child and adolescent development, and the like. Teachers also need pedagogical skills, which are typically taught in an education department. In two of the universities we studied, child development and teaching courses are housed in the same department: UMass houses them in the College of Education and Human Development; Boston College's Early Childhood Education and Elementary Education programs houses them in the Lynch School of Education and Human Development.

One important institutional decision is whether to offer courses in a single school, college, or department, versus across school and department boundaries.

In the other universities, required credential courses are taught in multiple departments. At LA Tech, for example, the two courses focused on curriculum and pedagogy are taught by a teacher education faculty member; the two courses on development are taught by faculty in human ecology. To make salient the practical implications of child development theory and research, LA Tech combines coursework with observations of children in real classrooms. Drawing on faculty from across the university can reduce costs and ensure that courses are taught by faculty with appropriate expertise. A caveat is that even faculty who teach basic theories of development should be able to make direct connections to practice, and faculty who teach methods courses should have some background in early childhood development.

Organizing Course Content

Many decisions need to be made about the organization of course content. One decision is whether to design courses only for candidates in the early childhood credential program or to include candidates in other credential programs (e.g., infants and toddlers, elementary education). Limiting a course to early childhood credential candidates ensures a focus on the age span they will teach, but it can be inefficient in programs with limited faculty and resources.

Programs in this study varied in their approach. At LA Tech, for example, the course Early Childhood Mathematics Methods focuses on the P–3 grades, while the science, social studies, reading, and writing methods courses combine elementary with early childhood candidates. At Northwestern State, candidates in the PreK–3 (ECE) and the 1st through 5th grades (elementary) credential programs take the same teaching methods classes, but the P–3 candidates take an extra block focused specifically on early childhood methods. Thus ECE candidates have some experience with elementary education, although their supervised clinical placements are mostly in PreK and kindergarten. At Boston College, there are five courses that are unique to early childhood; the rest are taken in partnership with elementary program candidates. UMass also has overlapping requirements for early childhood and elementary licensure. For example, candidates in both programs take the same courses on the processes of reading and on sociocultural perspectives in education.

Programs also need to decide whether to cover each topic in a separate course or to cover multiple topics within the same course; how extensively to cover each topic; and whether to require topics in addition to those required by the state (e.g., art, science, technology). Table 11 provides a summary of all the required programmatic courses in three undergraduate programs that were selected to illustrate the variation in how topics are "packaged." Topics not mentioned are often covered secondarily in the courses listed.

Table 11. Required Coursework of Three Undergraduate Preparation Programs

Course topic areas	Northwestern State University: Undergraduate Early Childhood Education (Louisiana)[a]	University of Massachusetts Boston: Undergraduate Early Education and Care in Inclusive Settings[b] (Massachusetts)	Montclair State University: Undergraduate With Teacher Certification in Early Childhood[c] (New Jersey)
Foundational child development theory	Introduction to Child and Adolescent Psychology	Child Growth & Development (Birth–8), Including Special Needs[d]	Child Development I: Theories of Child Development Child Development II
Teaching methodology & developmentally appropriate pedagogy	Child Development and Appropriate Practices for Young Children Program Design and Classroom Management for Young Children Environments for Young Children Instructional Planning[a] Appropriate Practices for Infants and Toddlers Technology Integration for P–12 Digital Age Learning Early Childhood Methods[d]	Supporting Social Interaction[d]	Philosophical Orientation to Education Foundations of Philosophy in Inclusive Education[d] Arts and Creative Expression in Early Childhood Integrating Curriculum & Pedagogy[d] Building Programs & Community in Inclusive ECE[d]
Special education and inclusion	Introduction to the Study of Individuals With Disabilities	Child Growth & Development (Birth–8), Including Special Needs[d]	Foundations of Philosophy in Inclusive Education[d] Building Programs & Community in Inclusive ECE[d] Psychology of Exceptional Children and Youth
Learning environments for multilingual learners	Foundations of Diverse Early Childhood Education	Rethinking Equity and Teaching for English Language Learners	Children's Literature for a Multicultural Society[d]
Curriculum development	Instructional Planning[d]	Curriculum Planning: Practicum I	Integrating Curriculum & Pedagogy[d]
Observations & assessments	Classroom Assessment Assessment and Data Literacy Early Childhood Methods[d]	Observing, Documenting & Assessing in Early Education & Care	(No dedicated coursework)
Social and emotional learning and development	(No dedicated coursework)	Supporting Social Interaction[d]	(No dedicated coursework)

Course topic areas	Northwestern State University: Undergraduate Early Childhood Education (Louisiana)[a]	University of Massachusetts Boston: Undergraduate Early Education and Care in Inclusive Settings[b] (Massachusetts)	Montclair State University: Undergraduate With Teacher Certification in Early Childhood[c] (New Jersey)
Culture, community, and working with families	Partnering With Diverse Families and Communities Best Practices in Early Childhood Family Literacy[d]	Sociocultural Perspectives on Education Family Systems Support & Engagement	(No dedicated coursework)
Mathematics methods	Standards-Based Pedagogical Skills for Teaching Numeracy Teaching Methods in Numeracy and Mathematical Practices in the Elementary School	Science and Mathematics Instruction for All Young Children	Mathematics in Elementary School Part I Mathematics in Elementary School Part II Problem-Solving in Science, Technology & Math
Literacy & language development methods	Introduction to Literacy Theory and Practice Best Practices in Early Childhood Family Literacy[d] Research-Validated Literacy Methods, Interventions & Applications Applications of Teaching Literacy in the Elementary Classroom	Language Development and Literacy Understanding Reading	Fundamentals of Speech: Communication Children's Literature for a Multicultural Society[d] Initial Inquiry Into Literacy Development
Other required coursework[e]	Art Education *or* Kindergarten and Elementary School Music Content and Techniques of Teaching Science in the Elementary School Content and Techniques of Teaching Social Studies in the Elementary School Health and Physical Education for Elementary School Classroom First Aid and CPR Child Nutrition	Responsibility and Ethics in Early Childhood Education	Perspectives on Early Childhood and Elementary Education in a Democracy Historical Foundations of Education General Psychology I

Course topic areas	Northwestern State University: Undergraduate Early Childhood Education (Louisiana)[a]	University of Massachusetts Boston: Undergraduate Early Education and Care in Inclusive Settings[b] (Massachusetts)	Montclair State University: Undergraduate With Teacher Certification in Early Childhood[c] (New Jersey)
Courses accompanying clinical experience	Residency I – Teaching in the Early Childhood Classroom Residency II – Teaching in the Early Childhood Classroom	Internship in Early Education and Care II Teacher Inquiry Practicum II	Clinical Practice I: Inclusive Elementary Classrooms Seminar I: Inclusive Elementary Classrooms Clinical Practice II: Inclusive Elementary Education Settings Seminar II: Inclusive Elementary Classrooms

[a] The Northwestern State University undergraduate early childhood education program requires 48 semester credits for PreK–3 credential and 76 additional credits for a Bachelor of Science in Early Childhood Education.

[b] The University of Massachusetts Boston undergraduate EECIS program with PreK–2 credential concentration requires 39 semester credits.

[c] The Montclair State University undergraduate with teacher certification in early childhood program requires 51 semester credits for P–3 credential and 24 credits of prerequisites included in a major in family science and human development.

[d] Course is listed under more than one category.

[e] Courses categorized into "other" did not fit into the 10 delineated categories for analysis.

Source: Learning Policy Institute analysis of course syllabi. (2022).

As shown in Table 11, programs varied in how they covered central topics in teacher preparation. Variations on critical topics are described in the following sections.

Child Development. Not all the study programs require a major in child development for the early childhood teaching credential (e.g., Montclair requires a major in family science and human development), but all programs have at least one dedicated course that covers child development theory, often in addition to weaving child development subtopics into other courses. Montclair's undergraduate program for teacher certification in early childhood, for example, requires 24 credits of prerequisites from the Family Science and Human Development program. Bank Street, on the other hand, has a general child development course and integrates child development theories into other courses. For example, its course Language Acquisition and Learning in a Linguistically Diverse Society focuses on theories of language development and various sociocultural factors that influence mono- and multilingual learners' development. In many programs, a developmental perspective explicitly includes "typical" and "non-typical" development and the social/environmental factors involved in development, such as family, community, and culture.

Observation and Assessment. There were significant differences in how observation and assessment were taught. Most programs teach broad skills related to assessment in a dedicated class. Northwestern State's undergraduate program, for example, requires a course on assessment in literacy that includes "designing formative and summative assessments; creating selected-response, constructed-response, and performance assessments; designing rubrics; developing individual and collaborative analytical skills based on student performance data, including evaluations of validity, reliability, and fairness;

making data-driven decisions for instruction and student feedback; assessment strategies for diverse learners, including English language learners and students with exceptionalities."[127] Likewise, Bank Street has a dedicated course on observation, The Study of Children in Diverse and Inclusive Settings Through Observation and Recording, in which candidates examine how bias and perspective impact observation. Programs that have a specific course on assessment also often address assessment issues in other courses. For example, LA Tech's undergraduate program includes the course Instructional Design, Strategies, and Assessment, but assessment is also included in the methods courses. Offering a separate course on observation and assessment does not obviate the need to include this topic in the context of subject matter methods because assessment is central to effective subject matter teaching and there are assessment strategies specific to subject matter.

Dual Language Learners. To some degree, addressing the needs of dual language learners needs to be woven into subject matter methods courses. Specific strategies can be used to help dual language learners develop math skills that are different from strategies used to support their literacy skills. There are also more general strategies, such as building vocabulary across all topics, speaking slowly, using visual aids, and checking for understanding. Programs vary in whether and how they support candidates' knowledge and skills related to educating dual language learners. UMass has a course specifically focused on dual language learners called Rethinking Equity and Teaching for English Language Learners. Boston College likewise has a dedicated course, Teaching Bilingual Students in Elementary Schools, but also specifically mentions dual language learners in the description of its language arts methods course. Some programs addressed dual language learners in courses focused more generally on cultural diversity and equity.

Culture, Community, and Family Connections. Most programs address cultural diversity in a dedicated course, sometimes combined with issues related to bilingualism. For example, Bank Street's course Foundations of Modern Education covers the historical, philosophical, and cultural roots of education and has candidates analyze how social issues impact their practice and how the role of education has been defined and negotiated in society. Northwestern State requires a course on partnering with diverse families and communities that is specifically designed to prepare candidates to partner with families; similarly, Boston College has a course called Partnering With Diverse Families and Communities in Early Childhood. But programs also embed culture and family into other courses. For example, at Bank Street, the course Language Acquisition and Learning in a Linguistically Diverse Society has candidates analyze how historical, political, educational, social, and emotional factors influence the social hierarchies of language varieties; a significant part of the course focuses on multi-language learners and includes instruction on how to collaborate with families, colleagues, specialists, administrators, and interpreters.

Special Education and Inclusion. Programs vary in whether children with special needs are explicitly mentioned in course descriptions. For some programs, exceptional children are not specifically mentioned but diversity is. Attention to children with special needs is, however, explicit in courses required in some programs. Boston College, for example, requires candidates to take Educating Learners With Disabilities. Northwestern State requires a course on disabilities, as designated by the Individuals with Disabilities Education Act, but also includes atypical development in a course on historical and philosophical foundations of early childhood education, a child development course, and a course on assessment. Strategies for addressing the needs of exceptional children are also mentioned in a course focused on the teaching of math.

Coverage Across Content Topics

Few programs had courses dedicated to social-emotional development and math methods. These topics may have been included in other, broader child development or curriculum development courses, but it is not clear that candidates are given specific training in how to help young children develop specific social-emotional and mathematical reasoning skills such as the critical social-emotional skills of emotional and behavioral self-regulation or conflict resolution and the foundational mathematical reasoning skills of cardinality, algebraic thinking, measurement, or geometric and spatial thinking.

There are many other topics, including specific subject matter teaching (e.g., health and physical education, science, social studies, and the arts), classroom management, and technology in education, that received variable coverage, either in dedicated courses or embedded in courses covering other topics. Some of these topics might be best addressed in methods courses. For example, using technology for assessment might be covered in a course on assessment. Using technology as a teaching tool might be included in a course on math or literacy methods or a course on teaching children with special needs.

Designing Clinical Experiences

Clinical experience, in which candidates spend time in classrooms in the grades they are preparing to teach, is essential for high-quality teacher preparation. Responsibilities vary from observing to working with a single child or small group of children to planning and taking instructional responsibility for the whole class. Clinical experiences are most effective when they are supervised and sustained, when candidates have opportunities to connect hands-on practice to knowledge developed through program courses, and when they have multiple opportunities to receive feedback.[128]

Clinical experiences are most effective when they are supervised and sustained, when candidates have opportunities to connect hands-on practice to knowledge developed through program courses, and when they have multiple opportunities to receive feedback.

The states and programs studied use different terminology for clinical experiences. Here we distinguish between two types: (1) *field-based learning experiences*, in which candidates spend some time in classrooms with varying levels of responsibility, often linked to the content of a course, and (2) *supervised clinical placement* (sometimes referred to as student teaching, field placement, or clinical internship), in which candidates spend continuous time in a classroom typically taking on increasing responsibility, usually after or at the end of their coursework.

As discussed earlier, each state has certain requirements for the clinical practice, including the required amount of time and grade levels. There are other important dimensions related to clinical experience that are at the discretion of the credential programs, including collaboration between the credential program and the school sites where candidates are placed and the coursework that accompanies supervised clinical placement.

Credential programs vary in terms of the collaborations they establish with placement sites. Most of the programs we studied developed ongoing relationships with sites, some more extensive than others. One way they do this is by providing professional development in schools serving as sites for the supervised clinical placements.

For example, Bank Street provides professional development to its partner schools and its own school, Bank Street School for Children, and supports mentor teachers throughout the supervised clinical placement experience. Because partner districts and the Bank Street School for Children have many teachers who are either graduates of Bank Street or have received professional development from Bank Street, the candidates are frequently placed in classrooms and learning environments that mirror what they are being taught in their coursework, resulting in greater alignment across their preparation experiences (see Bank Street's profile in Appendix D). Similarly, LA Tech has a "mentor coordinator" who holds regular mentor seminars every 2 or 3 weeks and provides a space for relationship building, answering questions about program requirements, and addressing any concerns that arise (see LA Tech's profile in Appendix F).

Credential programs also vary in terms of the coursework required during supervised clinical placement. In addition to courses connected to clinical experiences prior to the supervised clinical placement, some programs require coursework while candidates are engaged in their supervised clinical placement. For example, LA Tech candidates complete all their methods courses by the end of junior year. The full-year student-teaching placement in their senior year is concurrent with the last five required courses, including courses on instructional design and assessment, diverse learners, strategies for serving young children with special needs, and behavior and classroom management.

Strategies for Expanding Quality

There are many ways to organize courses and clinical experiences related to the knowledge and skills early childhood education teachers need. State guidelines map out what credentialed teachers need to know and be able to do, but programs must determine how to package the many domains of knowledge and skills, how much attention to devote to each, and how to offer meaningful field-based learning experiences. In Appendixes D, E, and F, we illustrate a holistic view of how three differently designed programs do this in both undergraduate and graduate settings in different states: Bank Street's early childhood general education master's program (Appendix D); Montclair's Newark Montclair Urban Teacher Residency and ECE undergraduate programs (Appendix E); and Louisiana Tech's ECE undergraduate program (Appendix F).

These profiles and our other cases highlight several common strategies and enabling factors that support quality early childhood teacher preparation. These include:

- Establishing a unified vision for preparation. Organizing the program around a shared, explicit vision of good practice that informs all of the courses and clinical work and the selection of partner schools, as Montclair has done, enables the success of multiple preparation programs and pathways.

- Ensuring a deep grounding in all areas of child development and learning. All the programs profiled establish a strong knowledge base of child development that serves as a foundation and lens for other coursework and pedagogical skills for candidates. This foundation also extends to family and community connections for a holistic and deep understanding of the child and to curriculum, assessment, and instruction in the core domains of learning.
- Integrating coursework and field-based experiences. Organizing coursework so that it is integrated and applied in field-based experiences, as illustrated by Bank Street and Montclair, makes for a more powerful learning experience.
- Providing sustained and intensive supervised clinical experiences. Providing a full-year clinical placement that allows for these links to coursework throughout the year (ideally with financial supports), as in the Montclair and LA Tech residencies and the Bank Street programs, establishes deep roots in practice. A critical aspect for deepening clinical experiences is an emphasis on reflective practices where candidates are encouraged to engage in reflection both individually and in groups to evaluate their teaching practices, assess classroom dynamics, and plan instructional improvements. This is especially evident at Bank Street, which uses reflection-based conference groups during supervised field placements.
- Developing strong school partnerships. Working closely with partner schools that instantiate best practices and provide a well-supported setting to learn to teach is crucial for providing quality clinical experiences. Programs like Bank Street, LA Tech, and Montclair emphasize their intentionality in the selection of partner schools. Montclair and LA Tech have formalized agreements with partner districts to ensure alignment between university curriculum and school needs.
- Offering personalized advising and mentorship. Personalized advising is a cornerstone of many of the programs studied. Faculty at Bank Street, Montclair, and LA Tech maintain close relationships with candidates throughout their education journey, offering regular one-on-one meetings, guidance on certification requirements, and targeted support during field placements. LA Tech in particular has strong supports for the development of mentors for candidates.

In conclusion, programs varied in how they organize course content. Some programs combine certain courses for candidates in early childhood and other credential programs. For instance, Northwestern State integrates early childhood and elementary education candidates in methods classes, adding extra early childhood–focused blocks, while Boston College chooses to offer more early childhood–specific courses. At CCNY, a strong emphasis is placed on culturally responsive teaching, with courses designed to integrate the role of culture, community, and family in early childhood education. However, some important areas, such as social-emotional learning and math methods, receive less emphasis in coursework across the programs.

The depth and structure of clinical experiences varied across programs. Louisiana Tech's full-year clinical experience stands out as an extensive model still integrated into undergraduate preparation programs, while other programs, like CCNY, include shorter but targeted clinical experiences integrated into urban school settings. Strong partnerships with local schools and mentor support play a key role in providing quality clinical experiences, as exemplified by programs like Bank Street, which has a close alignment between its coursework and placement schools.

Pathways to Support Access

Part of developing a high-quality credential preparation program is attracting a diverse candidate pool and supporting their success through the program. In this section, we examine the multiple pathways programs in this study use to make early childhood credentials accessible to a wide array of candidates.

Multiple Pathways to Support Access

Because early childhood educators come to the profession through numerous routes, it is crucial that states and IHEs develop multiple pathways that attend to candidates' varying needs and make advanced certification more accessible. Pathways are needed for candidates first entering the field of education, those seeking specialized learning related to young children, and those pursuing career advancement.

The eight institutions in this study designed multiple pathways for their candidates, including:

- integrated bachelor's degree and certification programs that can be completed in 4 or 5 years and connect undergraduate majors with the credentialing program;
- transfer pathways that begin at community colleges and routes for nonmatriculated candidates, such as dual enrollment high school programs, that are more affordable for a wide range of teacher candidates;
- postbaccalaureate pathways for candidates who already hold a bachelor's degree to become certified and, in some programs, earn a master's degree;
- dual certification programs in early childhood and bilingual and/or special education; and
- teacher residencies that enable candidates to work full-time as teachers with skilled expert teachers while completing coursework that is integrated with their clinical practice.

Table 12 summarizes the pathways offered by the institutions at the baccalaureate level that lead to a bachelor's degree and certification and those at the postbaccalaureate level, which include both certification-only programs and programs that lead to a master's degree and certification. Additionally, program profiles in appendices D–F illustrate several baccalaureate and postbaccalaureate early childhood teacher preparation programs.

Table 12. Preparation Programs and Pathways Offered at Study Institutions as of 2022

Institutions of higher education	Baccalaureate programs	Postbaccalaureate programs	Estimated completion rates	
			Traditional	Alternative
Louisiana				
Louisiana Tech University	• Early Childhood Education PreK–3 (BS) • Dual Enrollment Program for High School Students[df]	• Early Childhood Education PreK–3 (MAT)[ad]	95%	84%
Northwestern State University	• Early Childhood Education PreK–3 (BS)	• Early Childhood Education PreK–3 (MAT)[ad] • Master of Education in Early Childhood Education (MEd) for already certified teachers[a]	88%	98%
Massachusetts				
University of Massachusetts Boston	• Early Education and Care in Inclusive Settings (EECIS) PreK–2 (BA)[a]	• Early Childhood PreK–2 (MEd)[a]	84%	N/A
Boston College	• N/A	• Early Childhood Education PreK–2 (MEd) • Donovan Urban Teaching Scholars Program PreK–2 (MEd)[abcf]	82%	N/A
New Jersey				
Montclair State University	• Early Childhood Education P–3 (BA)	• Early Childhood Education P–3 (MAT) • Dual Certification: P–3 and Teacher of Students With Disabilities (MAT)[e] • Nondegree[adfg] • Newark Montclair Urban Teacher Residency: teacher certification in Early Childhood (P–3)/Special Education or Secondary Education (K–12) Mathematics or Science[acef]	82%	83%
	• Combined Dual Degree and Certification Program: P–3 and Teacher of Students With Disabilities (BA/MAT)[e]			
Rutgers University	• N/A	• Nondegree P–3 Endorsement Program[a]	83%	N/A
	• Combined Dual Degree and Certification Program: Elementary Education and P–3 (BA/MA)[e]		N/A	N/A

Institutions of higher education	Baccalaureate programs	Postbaccalaureate programs	Estimated completion rates	
			Traditional	Alternative
New York				
Bank Street College of Education	• N/A	• Early Childhood General Education B–2 (MSEd) • Early Childhood Special and General Education Dual Certification (MSEd)[de] • Dual Language/Bilingual Early Childhood Special and General Education B–2 (MSEd)[e] • Infant and Family Development and Early Intervention/Early Childhood Special and General Education B–2 (MSEd)[e] • Early Childhood General Education Advanced Standing B–2 (MSEd)[acf] • Early Childhood Urban Education Initiative B–2 (MSEd)[acfg] • Early Childhood Educator Residency Model (ongoing and rotating partnerships with multiple districts)[acf]	92%	N/A
City College of New York / CUNY	• Early Childhood Education B–2 (BS, Initial Certification)[ad]	• Early Childhood Education B–2 Track C (MSEd, Professional Certification)[ad] • Early Childhood Education B–2 Track B (MSEd, Professional Certification)[ad] • Early Childhood Education B–2 Track A (Initial Certification) • Advanced Certificate Leading to Initial Certification B–2[ad]	94%	96%

[a] Targeted toward current working educators

[b] Centered on recruiting and training educators of color

[c] Stipend or reduced cost and/or credit for experienced educators

[d] Courses offered online and/or hybrid

[e] Dual certification—bilingual or special education

[f] Cohort-based program

[g] Courses offered off-site (at community-based locations)

Notes: Title II reporting defines traditional teacher preparation providers as those that typically offer undergraduate programs and often attract individuals who enter college with the goal of becoming a teacher. Alternative teacher preparation providers often serve candidates who are the teacher of record in a classroom while participating in the program, often attracting candidates who already hold a bachelor's degree in a specific content area and may have prior work experience but are seeking to switch careers. Alternative routes to a teaching credential are defined and vary by state. Using Title II reports from the 4 most recently available academic years (2017–18 to 2020–21), we calculated the average number of enrolled candidates in both traditional and alternative teacher preparation programs at the IHEs we studied. We then divided this number by the average length of these programs (e.g., 2, 3, or 4 years) to calculate the average number of candidates enrolled each year. Lastly, we divided the number of most recent program completers (2020–21) by the average number of candidates enrolled each year to calculate the current completion rate. See Appendix C for more detail.

Source: Learning Policy Institute analysis of preparation program interviews and documents. (2022).

Baccalaureate Pathways

Baccalaureate-level pathways include integrated bachelor's and teacher preparation programs that can be completed in either 4 or 5 years and pathways from community colleges to baccalaureate preparation programs, such as dual enrollment high school programs and 2+2 programs (pathways to attaining a bachelor's degree by attending 2 years at a community college followed by 2 years at a bachelor's-granting institution).

In Louisiana and New Jersey, professional teaching credentials in early childhood and elementary grades are designed to be attainable through a 4-year bachelor's degree program; postbaccalaureate or master's-level credits or degrees are not required. Massachusetts and New York give only an initial, provisional licensure with a bachelor's degree; a master's degree is required for a professional teaching credential. Six of the institutions studied offered baccalaureate preparation programs. The exceptions were Bank Street and Boston College, both of which offered only graduate-level programs. (See Appendix E and Appendix F for profiles of Montclair and LA Tech's early childhood education baccalaureate programs.)

Integrated Bachelor's and Teacher Preparation Programs

Key features of integrated bachelor's and teacher preparation programs include the time to complete the program (i.e., 4 or 5 years) and the connection between undergraduate majors and the credentialing program. All of the bachelor's programs studied designed 4-year baccalaureate-level programs, with the exception of Rutgers' 5-year BA/MA combined Dual Degree and Certification Program in Elementary Education (K–6) and Preschool through 3rd Grade (P–3) program.

Majors required for a teacher credential vary. Some IHEs require a major in teacher education. Others allow for a major in human or child development, family science, or liberal studies, housed in a different department than the teacher preparation program. When a major outside of education is allowed or required, completing a bachelor's and credential program in 4 years is challenging but achievable. Montclair, for example, requires a major in family science and human development, but courses for that major provide some of the knowledge needed for the teacher credential. For example, the major provides candidates with a background in typical child development that is critical knowledge for teachers of young children, so this content is not repeated in the teacher certification program. Additionally, to make the major and credential program cohesive, faculty in the College for Education and Engaged Learning collaborate on coursework with faculty in the Department of Family Science and Human Development (in the College for Community Health) and the Center of Pedagogy, which coordinates clinical placements and mentorship. Finally, to make the program achievable, several years ago, Montclair reduced the credits required in all its bachelor's-level preparation programs to no more than 120 credits total. Even though teacher education candidates have both their non-education major coursework and teacher education coursework requirements, the credits required can be completed within 4 years by full-time candidates.

Transfer Pathways

Because community colleges serve disproportionately more students of color than bachelor's-granting institutions,[129] they can be a useful source for diversifying the pool of aspiring teachers. To facilitate efficient pathways through community colleges, common strategies employed by the IHEs studied include developing articulation agreements and creating opportunities to complete coursework as a nonmatriculated candidate.

Because community colleges serve disproportionately more students of color than bachelor's-granting institutions, they can be a useful source for diversifying the pool of aspiring teachers.

Developing Articulation Agreements Between IHEs. Articulation agreements between community colleges and bachelor's-granting institutions facilitate the completion of general education requirements as well as some introductory coursework related to teaching young children. The agreements usually specify coursework at community colleges during the first 2 years that can transfer to a bachelor's-granting institution, where candidates complete the last 2 years required for the bachelor's degree. This pathway is often referred to as a 2+2 model.

For example, in an effort to serve a racially, linguistically, and experientially diverse pool of candidates, the City College of New York's (CCNY) early childhood teacher preparation bachelor's program has developed ways for candidates to transfer credits and enter the program at the baccalaureate or postbaccalaureate level. Although New York state requires a master's degree to become a permanently certified teacher, CCNY has intentionally built baccalaureate-level pathways for candidates. Those at the very beginning of their career pathway can earn their preliminary early childhood teaching credential by taking courses to earn their Child Development Associate certificate (CDA). Those who get their associate degree at a 2-year institution can transfer their credits to CCNY.

States can facilitate access to 2+2 pathways. When the P–3 credential was initially implemented in New Jersey, candidates encountered difficulties when transferring courses from community to 4-year colleges. To facilitate the transfer of general education credits, the state legislature required articulation agreements between all 2- and 4-year colleges.[130] New Jersey also created an articulation agreement template and NJ Transfer website with resources for candidates to search for transfer programs, course equivalencies, transcript evaluation, and more. As a result, Montclair's Early Childhood Education P–3 preparation program draws a considerable number of transfer candidates from 2-year colleges.[131]

Likewise, the Massachusetts Board of Higher Education implemented the MassTransfer policy and website in 2008–09 to help IHEs create articulation agreements, which provide a more seamless process to transfer credits from a community college to a UMass campus.[132] UMass Boston has mapped pathways for candidates to complete general education and early education pathway courses in community college that transfer to the UMass PreK–2 credential bachelor's program. See Figure 3 for an example of one of the mapped pathways for early childhood education from a community college to the UMass program.

Figure 3. Example of a Mapped Early Childhood Education Pathway From Holyoke Community College to University of Massachusetts Boston

Area of Study	Credits	Holyoke Community College	To	University of Massachusetts Boston	Degree Requirements Fulfilled by Course(s)
Major Foundational Credits					
Introduction/Foundations of Early Childhood Education	3	**EDU 101** Early Childhood Programs *(3 credits)*	=	**ECHD 201** Foundations of Early Intervention and Education for All Young Children *(3 credits awarded)*	MAJOR
Child Growth and Development	3	**EDU 104** Child Development and Behavior *(3 credits)*	=	**ECHD 211** CHILD GROWTH AND DEVELOPMENT *(3 credits awarded)*	MAJOR
Curriculum	3	**EDU 210** Curriculum in Early Education *(3 credits)*	=	**ECHD 8101** ECHD Elective (Curriculum) *(4 credits awarded)*	MAJOR
Special Needs	3	**EDU 208** Introduction to Teaching Students with Exceptional Learning Needs *(3 credits)*	=	**ECHD 8102** ECHD Elective (Special Needs) *(3 credits awarded)*	MAJOR
Internship/Practicum I	6	**EDU 213** Student Teaching Practicum and Seminar *(6 credits)* *Note: +3cr ELEC*	=	**ECHD 290** Internship in Early Education and Care *(3+3 credits awarded)*	MAJOR
Other Credits					
English Composition/Writing	6	>> View eligible courses			GEN ED
Behavioral/Social Science	9	>> View eligible courses			GEN ED
Humanities/Fine Arts	9	>> View eligible courses			GEN ED
Math/Quantitative Reasoning	3	>> View eligible courses			GEN ED
Natural/Physical Science	7 (including one course with lab)	>> View eligible courses			GEN ED
Any Area	Remaining Balance	UMass Boston recommends that students complete two semesters of a World Language prior to transfer. Students should talk to the advising contacts listed above to ensure that their course selections fulfill both MassTransfer Mapped and associate degree requirements. Minimum grade requirements are in accordance with MassTransfer and institutional requirements.			MAJOR
60 credits completed at Holyoke Community College Early Childhood Education: Transfer Option (AS)			=	**60 credits transferring to University of Massachusetts Boston** Guaranteed admission *(with 2.50+ GPA and space permitting)* to Bachelor of Arts in Early Childhood Education	

Source: MassTransfer. (n.d.). *A2B mapped—Early childhood education*. Massachusetts Department of Higher Education. (accessed 05/22/2024).

Creating Opportunities to Enroll as a Nonmatriculated Candidate. Another strategy to attract a diverse candidate pool and support their success through the program is to recruit prospective teaching candidates from the community. This strategy is known as Grow Your Own educator programs.[133]

Dual enrollment is a type of Grow Your Own pathway that begins in high school. These programs seek to recruit teacher candidates who are more likely to reflect local diversity and continue to teach in diverse communities.[134] Dual enrollment programs provide opportunities for high school students to take credit-bearing college courses as nonmatriculated candidates, either at community colleges or bachelor's-granting institutions.[135]

In an effort to increase racial representation within its program, LA Tech started offering a dual enrollment program as an early on-ramp into teaching preparation. At the time of study, the program was still in its infancy with just one cohort of nine students at a high school in rural northwest Louisiana.[136] Because there were no instructors on staff at the high school with the qualifications to teach dual enrollment courses, the program was virtual, offering 9 hours of education courses: Introduction to Teaching, Introduction to Special Education (Human Exceptionalities), and Technology in Education. These same courses were also required of ECE undergraduate majors. Dustin Hebert, former Chair of the Department of Curriculum, Instruction, and Leadership at LA Tech, described the potential for these candidates to get a head start in college after graduating high school:

> These kids will all graduate with 9 hours, not just of college credit, but of college credit in education. If they also took AP credit exams or other dual enrollment courses and they plan it right, they could actually start as sophomores and shave off that freshman year because they basically double dip their senior year of high school and their freshman year of college. What we discovered was that this was low-hanging fruit. [Offering online dual enrollment courses] was something we could do without the need for any more resources and without all that many logistical complexities.[137]

CCNY shows another way to support candidates' entry into credential programs as nonmatriculated candidates. At CCNY, if program applicants do not meet the state-required 3.0 GPA for program admittance, they can be invited to take up to 9 credits (3 courses) as a nonmatriculated student (after already obtaining their high school diploma or equivalent). If they are able to demonstrate through these 9 credits that they can achieve a 3.0 or better GPA, they can be invited for an interview for formal admission into the program.

Postbaccalaureate Pathways

For the purpose of this report, postbaccalaureate-level preparation programs encompass master's degree programs and nondegree teacher certification-only programs geared toward credential candidates with bachelor's degrees. All eight of the IHEs that we studied offered certification programs that led to a master's degree, and three also offered teacher-certification-only programs (see Table 12).

Certification-Only Programs

Most certification-only programs in this study target current working educators. Because working candidates' job responsibilities compete with school, IHEs had to create ways to help them be successful in completing the program. A few programs provide a stipend or reduce costs for current educators, or offer courses off-site at community- or school-based locations to save candidates time they would otherwise spend commuting.

For instance, Montclair's certification-only program, the P–3 Modified Alternate Route, is designed to lead efficiently to the Master of Arts in Teaching (MAT) program. The 24 semester credits of coursework that candidates complete can all be transferred to the MAT program (within a 2-year period).[138] This credit transfer allows the certification-only candidates the option of continuing or returning at a later time to earn their master's degree. (See Montclair State University's Modified Alternate Route P–3 Certification Program.)

Montclair State University's Modified Alternate Route P–3 Certification Program

Montclair State University's (Montclair) Modified Alternate Route (MAR) P–3 certification program was launched in 2000 when New Jersey first adopted a P–3 early childhood teaching credential. The primary purpose of this certification-only program was to support early childhood educators who already hold a bachelor's degree to obtain their P–3 credential while employed as a state preschool teacher. Today, the program recruits a broader range of candidates but is still designed to be completed in 2 years for not-yet-certified teachers who are employed full-time. Presently, the candidate pool comprises current preschool teachers and teacher assistants who need to earn certification, people aspiring to become teachers as a career change, and K–6 certified teachers seeking to add P–3 certification.

Key components of the program's design include:

- cohorts that start in either the fall or spring;
- hybrid, evening format for all coursework (online with three or four face-to-face meetings each semester);
- coursework that is grounded in social justice and a focus on equity for young learners;
- multipronged supports such as university mentors who provide individual advising on credential and program requirements and dedicated writing and test preparation support staff;
- supervised clinical practice in the preschool or K–3rd grade position in which candidates are employed (1 semester of clinical supervision by Montclair staff in addition to 30 weeks of mentorship by a certified teacher in the district); and
- the option to apply MAR coursework to continued studies to earn their master's with only four to six additional courses.

The following figure shows the program format and course sequence.

Montclair State University Modified Alternate Route P–3 Certification Program Format

FALL 2021	
50 hours of pre-professional coursework (online, self-paced, zero credit course)	
FALL 2021	
ECEL 501 Perspectives on Early Childhood and Elementary Education in a Diverse Society (3 credits)	**ECEL 516** Social Studies and the Arts (3 credits)
SPRING 2022	
ECEL 517 Integrating Science & Technology in Early Childhood Elementary Classrooms (3 credits)	**ECSE 502** Sociocultural Contexts of Disability and Inclusive Education (3 credits)
FALL 2022	
ECSE 528 Integrated Curriculum and Pedagogy in Inclusive Early Childhood Classrooms (3 credits)	**READ 500** Literacy Foundations (3 credits)
SPRING 2023	
READ 519 Language and Early Literacy Development (3 credits)	**ECEL 502** Seminar I in Early Childhood Education (1 credit) AND **ECEL 510** Clinical Experience I (2 credits)

Source: Montclair State University. (2022, February 16). *P–3 Modified Alternate Route program (P–3 MAR) information session* [PowerPoint].

In addition to the program at its main campus, Montclair initiated a satellite cohort in the southern part of the state after the state observed during the initial Abbott Preschool mandate scale-up that few institutions of higher education offered P–3 credential programs in that area. The southern program coursework is offered at a local community-based site, and courses are offered in a hybrid format.

Montclair's MAR P–3 program has been developing teachers for the P–3 credential at a rate comparable to Montclair's undergraduate bachelor's-level P–3 program. As Alternative Route Teacher Education Program Supervisor Mia Kirk described:

> Our level of performance has grown as well as enrollment, and we are performing in terms of our passing rate on the state teacher performance assessment [EdTPA] in a comparable fashion to the traditional teacher preparation program. We're very proud of that, and I think that our performance in those areas has encouraged some mindsets to shift and to make it less of an auxiliary program. It's something that faculty now think, "We want to be a part of this, we want to be part of this movement." There's been a shift in paradigm.

Source: Interview with Mia Kirk, Supervisor, Alternative Route Teacher Education Program at Montclair State University. (2022, February 1).

Master's Programs

Master's programs that are designed to be accessible and supportive of experienced educators are particularly critical in states that require a master's degree for permanent certification—Massachusetts and New York in this study. Common features of the design of these programs that are intended to provide increased support for experienced educators include:

- allowing supervised clinical experience in candidates' current schools;
- using cohort-based models;
- reducing coursework requirements, including credit for previous experience;
- offering coursework at a reduced cost; and
- offering coursework on-site in community-based settings.

In New York, both CCNY and Bank Street have designed multiple master's programs with working educators in mind. For instance, Bank Street offers several master's in education programs that lead to an early childhood general education credential. To facilitate completion, one program, the Early Childhood General Education B–2 master's program, enables candidates to complete their supervised clinical experience where they are already employed. Another Bank Street program, the Early Childhood General Education Advanced Standing B–2 master's program, admits lead preschool teachers who have a bachelor's degree and at least 3 years of teaching experience. It utilizes supervised clinical experience at candidates' current schools, a cohort-based design, and reduced coursework requirements (30 credits rather than 45, with up to 6 credits awarded for prior teaching experience).

Dual Certification Programs

Although many teacher education programs require teacher candidates to take one or more courses focused on student populations with specialized education needs—including multilingual learners and students with disabilities—some experts believe that many teachers do not experience the level of preparation necessary to support the diversity of assets and needs of both groups.[139] Dual certification programs, which can be offered at the baccalaureate or postbaccalaureate level, are seen as a way to deepen teacher candidates' understanding and skills for addressing the needs of multilingual students and students with specialized education needs.

Among the institutions we studied, dual certification programs were offered for early childhood educators to specialize in teaching students with disabilities or multilingual learners. Because of the extra coursework content required, all of the four institutions in this study that offered dual certification programs did so either as a combined bachelor's and master's degree 5-year program or as a postbaccalaureate master's program. Some programs have found ways to limit the additional coursework required to cover the additional content to 10 or fewer credits, such as Bank Street's Dual Language/Bilingual Early Childhood Special and General Education Dual Certification Program. This program is focused on preparing teachers to create inclusive environments for emergent bilingual children. Candidates pursue a Master of Science in Education that focuses on constructing developmentally responsive learning experiences and creating accessible curricula. This program has 54 credits and includes supervised clinical experience in which student teachers are placed in a bilingual early childhood classroom. The dual certification program also has a master's project alongside state-mandated training on school violence prevention, child abuse identification and reporting,

and the Dignity for All Students Act. To complete the clinical experience requirement, candidates work either as a full-time head teacher or assistant or as a student teacher 3 days a week. In addition, they participate in a summer supervised clinical experience.

Residencies

A growing body of research suggests that teacher residencies, which can be offered at either the baccalaureate or postbaccalaureate level, are a promising earn-while-you-learn pathway to a teaching credential that can recruit, prepare, and retain a diverse teacher workforce.[140] Residency programs are modeled on medical residencies' intensive, hands-on supervised preparation. Residencies ideally allow teacher candidates to serve as paid apprentices with a skilled expert teacher while completing credential coursework that is highly integrated with clinical practice.[141] Residencies can offer a pathway into teaching for recent college graduates, career changers, and educators who have been working in schools but are not yet certified to be teachers of record in P–12 settings. Some common features of effective teacher residency programs are:

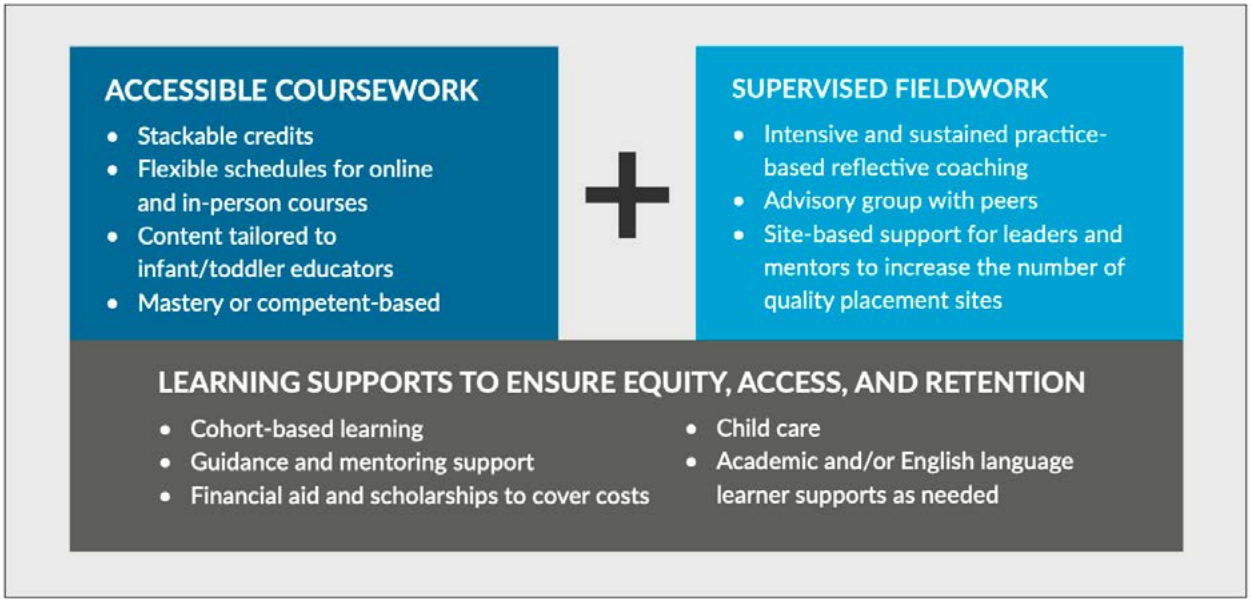
A growing body of research suggests that teacher residencies, which can be offered at either the baccalaureate or postbaccalaureate levels, are a promising earn-while-you-learn pathway to a teaching credential that can recruit, prepare, and retain a diverse teacher workforce.

- strong partnerships between school districts, universities, and sometimes other organizations, such as teacher associations or nonprofit support providers;
- coursework about teaching and learning that is tightly integrated with classroom practice;
- a requirement of a full year of teaching, working alongside an accomplished mentor teacher;
- efforts to recruit diverse candidates for specific district instructional and hiring needs, often in shortage areas, including early childhood;
- financial support for preparation and living expenses, often in exchange for the resident's commitment to teach for a specified minimum number of years in the district in which they do their residency;
- cohorts of residents placed in "teaching schools" that model evidence-based practices with diverse learners; and
- ongoing mentoring and support provided by the partner district for residency graduates after they enter the teaching workforce.[142]

Because residencies tend to be formed based on specific grant funding opportunities and district-driven areas of high need, participants in our study indicated that they have found that residency programs can be challenging to sustain. Bank Street and Montclair have long-standing teacher residency programs, although there have been some short-term pauses due to changes in funding or partners. The key components of the Bank Street early childhood educator residency model include accessible coursework;

supervised clinical experience; and learning supports to ensure equity, access, and retention (see Figure 4). Montclair has partnered with Newark Public Schools to establish its residency program (see Newark Montclair Urban Teacher Residency Program).

Figure 4. Bank Street College of Education's Early Childhood Educator Residency Program Components



Source: Bank Street College of Education. (2022). *Design elements of an early childhood educator residency model*.

Newark Montclair Urban Teacher Residency Program

Montclair State University has established a residency program through an ongoing partnership with Newark Public Schools. The Newark Montclair Urban Teacher Residency program is an initial teacher certification program for college graduates and career changers with a commitment to urban education. This partnership was formed to prepare teachers to work in high-need or shortage areas (e.g., schools with high numbers of children with special needs, shortages of math and science teachers). As a result, candidates can pursue a Master of Arts in Teaching (MAT) with teacher certification in either a combined Early Childhood (P–3)/Special Education or K–12 Mathematics or Science.

In accord with the research on successful teacher preparation programs, the Newark Montclair Urban Teacher Residency provides on-site coursework in a cohort-style environment of no more than 15 candidates. It also provides program graduates with intensive induction support, mentoring, and professional development through their first 3 years of teaching. Participants in this program receive a living stipend of $26,000–$30,000 during their residency, a tuition waiver covering approximately two thirds of their tuition cost, and hiring preference by Newark Public Schools.

One early childhood special education teacher graduate of the residency program described what they saw as the value of the program's supports: "Part of what is helping us is that we do have so much support from [Montclair] and from our principal. … I feel like the different supports available

to us and [being] able to bounce ideas off each other is making us better teachers." Teacher evaluation data, which combines observations and student achievement, has shown that 100% of Newark Montclair Urban Teacher residents were rated as effective or highly effective upon program completion.

Sources: Montclair State University. (2016). *Newark Montclair Urban Teacher Residency* [Video]; Montclair State University. (n.d.). *Newark Montclair Urban Teacher Residency Program*.

Expediting and Tailoring Pathways

The early childhood teacher preparation programs at both the baccalaureate or postbaccalaureate levels can be tailored to current early childhood educators and expedited to leverage their experience by allowing teachers to teach in P–3 classrooms while they work on their credential. Expediting and tailoring existing pathways enables states and districts to more quickly increase the early childhood educator workforce needed for preschool scale-up. This section describes how New Jersey and New York support existing, experienced early childhood educators as part of their preschool expansion efforts.

New Jersey

As discussed earlier, in response to the Abbott Preschool Program mandate in 2000, the New Jersey Commission on Higher Education quickly established the PreK–3 credential and collaborated with higher education partners to rapidly create certification programs.[143] New Jersey developed three main pathways to the credential: (1) 4-year bachelor's degree plus credential programs, (2) postbaccalaureate programs, and (3) tailored programs for early childhood educators with a bachelor's degree (referred to by the state as "alternate route programs").

In addition to offering multiple pathways, New Jersey took a multipronged approach to supporting program development and candidate success. First, it made investments to build higher education's capacity to develop P–3 programs that prepare new P–3 credential candidates as well as candidates in other shortage areas. Second, to enable experienced educators to return to school to meet the new credential requirements, between 2000 and 2006, New Jersey provided scholarships through the New Jersey Professional Development Center. Educators could receive up to $5,000 per year for tuition and an additional $50 per course for books or other expenses. This amount would have covered the full cost of tuition at public schools, although not incidental expenses such as travel and child care. Third, the state worked with institutions of higher education to make credentialing coursework available to working candidates, particularly during the initial implementation years. These steps included providing substitute teachers for preschool classes; convenient course locations (e.g., via extension satellite facilities, on-site at school districts, at community-based child care centers) as well as online and hybrid options; courses at night and on weekends; academic supports; and academic advising.

New York City

In 2014, the New York City Department of Education (NYC DOE) began implementing universal preschool for 4-year-olds (Pre-K for All), which includes both public school–based and community settings, and then began expanding it to 3-year-olds in 2017 (3-K for All). New York state has had the early childhood birth–2nd grade credential in place since 2003, but the expansion of Pre-K for All in 2014 increased the demand for credentialed teachers.

To address the increased need for credentialed early childhood teachers, the city took multiple steps. For one, the NYC DOE articulated pathways to the classroom for different levels of certification and experience. For example, the Study Plan Lead Teacher pathway is for teachers who do not hold a New York state certification, though they may be experienced educators with a bachelor's degree in early childhood or related field, or teachers certified in another state. Candidates taking this path can be hired as a lead teacher at a New York City Early Education Center for 4-year-olds if they hold at least a bachelor's degree in early childhood or a related field; have completed some ECE coursework OR have significant experience working in ECE; and commit to obtain a New York State Early Childhood (B–2) teacher certification within 3 years of employment and develop a study plan to get there.

Another option offered is the Internship Certificate, which offers temporary certification for teachers who have completed more than half of their B–2 credential program and have a letter from a principal verifying a job offer. For this option, the teacher preparation program must supervise a candidate's teaching (through a 1-credit supervision per semester) until the formal student-teaching semester, which can be completed in the school in which the candidate is hired. The teacher must complete the program and pass all certification exams within 2 years of receiving the Internship Certificate. The NYC DOE also partnered with the City University of New York's (CUNY's) Early Childhood Professional Development Institute (PDI) during the first year of Pre-K for All to add substantial financial and advisory supports to the available Study Plan and Internship Certificate pathways. The expedited programs were tuition-free or subsidized and included personalized advising, coaching, test prep, and certification application support provided by CUNY's Early Childhood Professional Development Institute (see City University of New York's Pre-K Teacher Preparation Project).

City University of New York's Pre-K Teacher Preparation Project

To prepare for the increased need for credentialed teachers for New York City's Pre-K for All, CUNY's Early Childhood Professional Development Institute implemented a PreK Teacher Preparation Project funded by a $6.7 million grant from the New York City Department of Education. The project was designed to certify up to 400 educators by 2015 using two tracks.

The first track was an intensive 15-month program for aspiring PreK teachers with a BA in any major to earn their master's and B–2 credential tuition-free while working as a lead PreK teacher of record, leveraging the Internship Certificate option. Program participants enrolled in the B–2 credential program at one of five participating CUNY campuses. The program included:

- an initial summer institute (June–August 2014) with 12 credits of coursework;
- a PreK for All classroom supervised clinical experience in a community-based center (September 2013–June 2014), working full-time while completing additional coursework and receiving supervision and mentorship; and
- a second summer institute (June–August 2015) to complete remaining coursework and student teaching in a summer learning program to fulfill the state's requirement for clinical experiences in grades K, 1, and 2.

Although the CUNY PreK Teacher Preparation Project was successful at certifying additional teachers, with 89 out of 100 of the Early Childhood Teaching Scholars completing the program, there was consensus among informants that the 15-month timeline to complete an early childhood master's and certification while working full-time was too intensive and stressful, particularly for candidates who were career changers. They suggested 24 months as a more reasonable time frame.

The second track, an expedited study plan track, was targeted toward existing early childhood educators with a bachelor's degree who were already working toward their credential. The program provided additional supports to enable these educators to move through the Study Plan Lead Teacher pathway more efficiently and faster than they would be able to do on their own, potentially within 1 year. The program reached out to Pre-K for All directors at community-based sites to ask them to nominate PreK teachers for the program. Supports included (a) initial screening to determine participants' eligibility and needs (targeting teachers already on study plans enrolled in a preparation program to finish quickly); (b) individualized professional development planning; (c) progress monitoring through the Aspire Registry (New York's online system for tracking qualifications and certification for education professionals); (d) personal advising offered during the day as well as evenings and weekends; (e) coaching; (f) student-teaching support; (g) tuition assistance; (h) test preparation; and (i) certification application support.

Sources: Fischkin, B. (2015, January 1). Education start-up: Five CUNY colleges training city's PreK teachers [Blog post]. *The City University of New York*; LPI analysis of interviews with CUNY and New York City Department of Education staff. (2022).

Even with their initial investments, New York informants emphasized that they needed additional supports for recruitment and retention. One way that NYC DOE worked to address the unmet need for staff was through the Lead Teacher Incentive Program, which began in 2016 to attract and retain certified lead teachers in full-day PreK programs at the community-based New York City Early Education Centers. For all programs that opted to participate, NYC DOE made an incentive available to all eligible lead teachers. Fully certified birth–2nd grade lead teachers returning to the same preschool program as the previous year received a $3,500 retention incentive, and certified new-hire lead teachers received $2,500 for their first year.

The state has also put into place scholarships designed specifically to increase qualifications across the early learning system and build the pipeline of qualified educators. The CUNY-SUNY B5 Early Childhood Workforce Scholarship was created as a need-based scholarship designed to help existing early childhood educators working 20 hours or more in a licensed early childhood center or family child care center earn the child development certificate they would need to serve as a lead teacher (akin to the Child Development Associate Credential [CDA] in many states or the Child Development Permit in California), a 2- or 4-year degree, or a B–2 teaching credential.[144]

To ensure recipients receive individualized advising, the scholarship requires them to go through one of the 10 CUNY or State University of New York (SUNY) career centers and meet with a career advisor 3 times each semester. The scholarship was first piloted at CUNY and funded with university funds. After the first year, the scholarship was expanded to all CUNY and SUNY campuses, and it is currently funded by federal Preschool Development Birth Through Five Renewal Grant funds administered by the state. CUNY and SUNY administrators who developed the scholarship hope that the state will invest in the program directly, rather than solely relying on federal grant funding, for long-term sustainability.

Common Strategies and Enabling Factors to Support Access

In this section, we summarize themes from the studied states and preparation programs to identify common strategies as well as important enabling factors needed to support access to high-quality early childhood teacher preparation and maintain the diversity of the early childhood educator workforce.

Strategies to Support Access

Across the preparation programs and pathways studied, we identified several common strategies used to attract people to the field of early childhood education, and especially to reduce barriers for candidates from diverse backgrounds so they could earn their early childhood credentials. These strategies included:

- subsidizing the cost of tuition and offering additional financial supports;
- reducing required units and aligning courses and credits with related programs and institutions;
- tailoring the location, modality, and timing of courses to candidates' needs;
- building a sense of community among candidates and faculty;
- conducting multipronged outreach and recruiting candidates from racially, linguistically, and culturally diverse backgrounds; and
- providing specialized advising and multifaceted supports to manage certification requirements.

Subsidizing the Cost of Tuition and Offering Additional Financial Supports

In many cases, given the cost and debt burden of teacher preparation programs, teachers of color are more likely to begin teaching without completing a comprehensive, high-quality preparation program that grants a credential.[145] Subsidizing costs in easily accessible ways is a key strategy to encourage more candidates of color and candidates from diverse socioeconomic backgrounds to pursue high-quality teacher credential programs. Financial support can be offered through scholarships and tuition assistance programs that cover or reimburse a significant portion of tuition costs. Interviewees in New Jersey and New York noted that credential candidates face monetary burdens beyond tuition, such as child care for their own children, funding for books and related course expenses, and certification exam and application fees.

IHEs can leverage institutional funding and also maximize available state and federal funding by offering specialized financial advising to support candidates. Some IHEs, such as LA Tech, leveraged donor funding to offer scholarships to teacher preparation candidates. Others partnered with districts to tap into grant-based funding, like the Newark Montclair Urban Teacher Residency program, or tapped federal TEACH grants and federal work study opportunities (though TEACH grants still often fall short of covering a significant portion of the cost of preparation). Reducing the per-unit cost was another strategy utilized by several institutions, including Bank Street, which initially partnered with the New York City Department of Education (NYC DOE) to subsidize the cost of coursework for not-yet-credentialed preschool teachers and now sustains these subsidies through private funding.

Reducing Required Units and Aligning Courses and Credits With Related Programs and Institutions

Several of the institutions we studied have reduced the number of credits they require to decrease costs and time to complete preparation programs. For example, Montclair reduced the maximum number of units required for completion of all bachelor's degree programs to 120. Informants indicated that the university considered making an exception for teacher education programs, as candidates must both major in a liberal arts subject and take courses in teacher education, but ultimately the teacher preparation faculty were able to collaborate with the family science and human development major faculty to revise the coursework to require no more credits than other majors.

Aligning requirements between BA and master's teacher education credentialing programs, giving credit for general education courses at the community college level, and giving credit for experience are other ways in which IHEs reduce barriers. Montclair aligned its coursework between its P–3 Master in the Art of Teaching and its postbaccalaureate P–3 Modified Alternate Route (MAR) program so that candidates in the MAR program can complete their master's with only four to six additional courses. Massachusetts and New Jersey have statewide articulation agreements that streamline the process for crediting general education requirements completed at 2-year institutions. Finally, Bank Street's B–2 Advanced Standing master's program utilizes individualized review of transcripts and employment documentation to give course credit for teaching experience.

Tailoring the Location, Modality, and Timing of Courses to Candidates' Needs

Another barrier to many candidates, particularly working candidates, is the need to travel to campus and attend classes in person. To address this challenge, nearly all the institutions in this study, including Bank Street, LA Tech, Montclair, Northwestern State, and CCNY, implemented one or more programs that offered courses in an online or hybrid format, off-site at a community location, or on evenings or weekends.

Nearly all the IHEs in this study implemented one or more programs that offered courses in an online or hybrid format, off-site at a community location, or on evenings or weekends.

For example, CCNY has sustained the shift it made from predominantly in-person to virtual synchronous learning, which it initially made as a result of the COVID-19 pandemic, on a much larger scale. Beverly Falk, Professor and Director Emerita, Graduate Programs in Early Childhood Education at CCNY, said that candidates used to travel over an hour to get to class after a long day of work. Now, candidates join virtual 5:00 p.m. class sessions promptly, and she noted that "people have also contributed more in the class by using chat. … It feels less threatening than sitting in a room with people to try to speak up."[146]

Montclair's P–3 MAR program offers a satellite cohort in South New Jersey that meets at a local child care site for the in-person "campus" hybrid course meetings. Alternative Route Teacher Education Program Supervisor Mia Kirk explained:

> We try to make sure that both programs (satellite and main campus) are basically the same, and the only difference is the geographic location. … Of the two courses that students take each semester, they only have to be on campus between 2 to 4 times a semester per course. … When they meet on campus, the courses are from 5:30 to 8:00 p.m.[147]

A cohort-based design allowed some programs to tailor their program and supports for a specific group of candidates (see Cohort-Based Pathways).

Building a Sense of Community Among Candidates and Faculty

IHE informants emphasized the importance of building a sense of community among candidates and faculty to support successful retention and completion by early childhood educator credential candidates from diverse backgrounds. A common strategy employed by multiple IHEs was creating cohort-based models (typically ranging from 10 to 30 candidates). Cohorts enable efficiency in tailoring the coursework content as well as location and timing to the specific group and also allow candidates to build deeper relationships with faculty and one another. Bank Street, Boston College, LA Tech, and Montclair all had at least one cohort-based program.

Some programs also offer summer orientations to candidates prior to the official start of the semester so they can build relationships with faculty and other candidates. For example, Northwestern State offers multiple opportunities for prospective education candidates to meet faculty and other candidates and to learn about the program and teaching as a profession. Katrina Jordan, Director and Associate Professor of the School of Education at Northwestern State, explained:

> I work with the recruitment office and I work Freshman Connection [summer orientation that includes introduction to education classes]. We have something called the Comm Room, where education majors come in and I greet them, talk about the program, and talk about what they need to do to make sure that they're enrolled. I also teach the University [Studies] 1000 class where we have a freshman interest group of education majors and get them oriented to the education department. We also have something called Education 2020, which is an introductory class, and our education staff go to those classes and tell students all about entry into teaching so that they know the expectations and what's needed, with a chance to actually fill out their paperwork in that class.[148]

LA Tech provides a summer orientation advising session. Dustin Hebert, former Chair of the Department of Curriculum, Instruction, and Leadership at LA Tech, explained that "by the time the students set foot in their first class in that fall quarter, they already know at least one faculty member with whom they have a connection." He added that this session has helped the education faculty be more proactive than reactive in their advising.[149]

Cohort-Based Pathways

The Donovan Urban Teaching Scholars PreK–2 credential program at Boston College is an intensive 1-year cohort-based master's program that focuses on recruiting aspiring educators of color. Candidates who are accepted into this program receive a minimum of 50% tuition remission and participate in cohort-based classes and professional development courses. Throughout the program, candidates participate in yearlong clinical experience placements in partner urban schools in small cohorts to work with marginalized populations as part of pre-practicum

work. Charles Grandson, Chief Equity and Strategy Officer for Boston Public Schools, described the importance of the Donovan program for the pipeline of well-prepared educators to teach in Boston:

> That program prepares educators to teach in urban classrooms in Boston. Over the years, it has been an important pipeline for developing equity-minded and social justice–minded educators who teach to the whole student. Four of my former students have gone through the program and are now teachers themselves. To be able to see them in classrooms is just a really rewarding thing.

Another example of a tailored cohort-based pathway was Bank Street's Early Childhood Urban Education Initiative B–2 credential program. This initiative was built to alleviate barriers for experienced teachers working in early learning settings in under-resourced neighborhoods in New York City to earn their master's and New York State Early Childhood (B–2) teaching credential. The following were key features of the program design.

- A stable cohort of candidates take a common sequence of 45 units of coursework completed over a 3-year period while working full-time.
- Coursework is provided at a reduced cost.
- Most courses are offered on-site in the community in which candidates live and work (thus far in the Bronx, Harlem, and Washington Heights) at times that accommodate their work schedules.
- The content of coursework and assignments is tailored to capitalize on the candidates' existing strengths while helping them hone their teaching knowledge and skills.
- Supervised clinical experience occurs in candidates' primary job placements but also includes experiences with two other age groups (per New York state's requirements): PreK, K, and grades 1 and 2.
- Bank Street's Center on Culture, Race & Equity provides support to the schools in which participants work.

Maria Rodriguez, a student in Bank Street's second cohort of the Early Childhood Urban Education Initiative, described her experience in the program:

> My experience at Bank Street has been eye-opening, challenging, and incredibly helpful. I'm learning in this field how to work as a teacher, how to help children, how to help families, how to help my coworkers and classmates. … It has been challenging because I'm an English language learner and putting my thoughts on paper and discussing my ideas in class have been difficult. But I hope to get better, as I feel I am doing in everything else.

During its duration, the program had a 95% completion rate, with 52 successful graduates across the three cohorts, 47 of whom identified as Black, Indigenous, or people of color (BIPOC).

Sources: Bank Street Graduate School of Education. (n.d.). *Bank Street Graduate School of Education Early Childhood Urban Education Initiative*; Boston College. (n.d.). *Donovan Urban Teaching Scholars Program*; Bank Street Graduate School of Education. (2018). Meet the second cohort of the Early Childhood Urban Education Initiative! [Blog post]; Personal email with Peggy McNamara, Senior Director of Student Learning Support and Community Initiatives at Bank Street College of Education. (2022, November 11).

Conducting Multipronged Outreach and Recruiting Candidates and Faculty From Racially, Linguistically, and Culturally Diverse Backgrounds

Preparation program administrators also mentioned conducting specific outreach to attract teaching candidates from diverse backgrounds. For example, Katrina Jordan, Director and Associate Professor of the School of Education at Northwestern State, discussed recruitment efforts to increase the representation of minority males in early education through the Call Me MISTER initiative at Northwestern State, which is trying to recruit and support five Black male candidates every year through academic mentoring and financial support to become teachers.

In New York City, the NYC DOE initiated a multipronged recruitment campaign for PreK teachers, including partnering with local universities with early childhood teaching programs (such as Bank Street, CUNY, Fordham University, and New York University) to communicate information on various pathways into the ECE workforce and recruit early childhood teacher candidates. NYC DOE also held hiring events throughout the city and launched a Teach NYC PreK subway ad campaign.[150] To support recruitment efforts and provide clarity on the qualifications, NYC DOE developed a web page explicitly detailing various pathways into ECE classrooms based on different levels of certification or experience, along with resources and information on the unique qualifications needed for ECE roles.

Several preparation programs also discussed leveraging state organizations and meetings as a strategy for recruitment. This strategy included direct outreach to school and district human resources directors and attending conferences and member meetings for state superintendents, teacher leaders, and early childhood associations.

Similarly, a few informants mentioned diversifying the racial, gender, and cultural makeup of the preparation faculty as an important strategy for recruiting candidates from diverse backgrounds. The underlying assumption, supported by research,[151] is that teacher preparation programs could recruit more diverse groups of teacher candidates if candidates can see themselves represented in the faculty and profession. This has been a goal of Mariela Páez, Associate Professor at the Lynch School of Education at Boston College, since she joined the school:

> Over the years, we've increased the number of female professors, then in the more recent history, the past 5 years, we have increased the number of faculty of color. I think that has been important for recruiting a more diverse population of master's students. I'm so happy to say that my last two cohorts have been almost half students of color, and that has been a long-term goal of the department and of me as a director.[152]

Providing Specialized Advising and Multifaceted Supports to Manage Certification Requirements

Finally, as described earlier, given the disproportionate barrier that certification and exam requirements can pose to candidates from diverse racial, linguistic, and socioeconomic backgrounds,[153] a common strategy to support success among the IHEs in this study was to offer multifaceted supports. These supports include academic and career advising, mentoring, writing and literacy support, and test preparation. To support candidates as they navigate preparation programs at CCNY and other CUNY campuses, faculty work with candidates to review their previous experiences and coursework, plan their programs, and advise them on course and credential requirements. Interviewees in New York and New

Jersey emphasized that while rapid scale-up of public preschool or teacher shortages due to other causes can create a pressing need for additional credentialed teachers, state and program administrators need to be mindful of avoiding burnout and setting candidates up for success. Tailored and expedited pathways need to include additional supports (e.g., advising, mentoring, peer supports) and allow enough time for candidates to manage requirements and thus reduce burnout.

Importantly, providing individualized and intensive support requires additional IHE staff capacity. At Montclair, for instance, the department added part-time employees and graduate assistants to offer evening appointments, workshops, and one-on-one meetings to support candidates to prepare for the certification examinations. Boston College provides additional supports to prepare educator candidates for state-required credential exams. Most P–3 candidates at Boston College pass the required exams, although there have been a few who paid to retake the exam. The state offers workshops through some universities to prepare candidates for credentialing exams, but at a cost to candidates. Boston College's program director mentioned that participating in these workshops is not free to candidates, but in the end might be cheaper than retaking the test multiple times.

Through advising and peer sharing, program administrators at Bank Street work to help candidates understand the content in the state-required exams, reduce test-related anxiety, and increase their confidence in their knowledge and skills.

Enabling Factors

To offer high-quality programs and attract a diverse pool of early childhood teacher candidates, programs themselves need the enabling factors of financial support for capacity building, and states and IHEs need additional data to inform their efforts. Interviewees shared what they had learned from their efforts to attract candidates to the early childhood teaching credential, particularly to help maintain a diverse early childhood educator workforce.

Provide Additional Funding for Program Development and Capacity Building

In order to balance quality with diversity and accessibility, both New Jersey and New York City made investments in higher education. Investments in higher education include collaborating with IHEs to develop, communicate, and implement multiple pathways to credentials and to classroom teaching positions. New Jersey and New York City also provided funding for higher education capacity building that enabled them to implement tailored preparation programs and remove barriers to obtaining a credential for the existing diverse early childhood educator workforce. Interviewees in preparation programs in all four states mentioned the need for additional funding for preparation programs to build capacity. For example, preparation programs need dedicated funding and graduate fellowships to recruit faculty from diverse backgrounds who have the appropriate experience and expertise in developmentally appropriate pedagogy for early childhood. They need time for faculty to design programs and develop coursework. They need dedicated staff to advise and supervise candidates regarding program requirements as well as for clinical supervision. And they need additional funds to provide financial assistance and stipends to candidates.

Collect Data to Track Changes to the Early Childhood Educator Workforce

At the state level, New Jersey and New York both lacked comprehensive data on the qualifications and characteristics of the ECE workforce prior to scaling up public preschool and thus could not monitor or track progress or changes in the composition of the workforce. For example, between the 1999–2000 and 2005–06 school years, the percentage of fully certified P–3 teachers in New Jersey increased from 38% to 97%.[154] However, because the state did not collect information on teachers' race and ethnicity before and after the reform, little is known about how the policy changes under the Abbott mandate affected the diversity of the workforce. New York did, however, require candidates receiving scholarships to join the state workforce registry to allow for monitoring of progress following the initial scale-up. Respondents in New Jersey and New York stressed the importance of collecting data on the demographics, qualifications, and job placements of early childhood educators to understand how changes to policies and financial investments affect the ability to maintain a racially and linguistically diverse early childhood teaching workforce.

Policy Recommendations

The findings in this report detail the efforts states and institutions of higher education (IHEs) have made to create high-quality, accessible pathways to an early childhood teaching credential. This section identifies key policy and practice strategies for ensuring that candidates develop the knowledge and skills they need to be effective teachers, recruiting candidates from diverse backgrounds, making the credential accessible, and supporting working candidates' success.

- **Design guidelines for program coursework and fieldwork that will effectively develop early educators' knowledge and skills.** States can develop preparation program guidelines, informed by research on effective teaching practices in early childhood, for the knowledge and professional skills teacher need. Guidelines that outline content needed for strong preparation-level coursework should include early literacy skills, methods for teaching early math, social-emotional learning, differentiation, and family and community engagement. The guidelines should inform the program accreditation and review process and be aligned with state assessments required for the credential. States need to be realistic about how much content can be covered in a preparation program, strategically navigating the tension between comprehensiveness and accessibility. Decisions need to be made about what knowledge and skills are most important so that preparation programs can be completed in a realistic amount of time. IHEs can, in turn, develop course sequences and field experiences that cover the content in state guidelines in a way that is tailored to the needs of their candidates.

- **Support the articulation and alignment of coursework across and within institutions of higher education to enable more accessible pathways toward credentials for early childhood teachers.** Having aligned coursework allows candidates to begin their prerequisites and credential coursework in community colleges and transfer these units seamlessly into 4-year settings where they can complete their credential. To further support course alignment across programs, states can require or incentivize educator preparation programs to develop articulation agreements with other higher education programs for 2-year, 4-year, and postbaccalaureate pathways, as developed in both Massachusetts and New Jersey. IHEs can also develop their own agreements—similar to City College of New York's—with local community colleges and universities. They can also train staff to review transcripts and provide credit for coursework taken at other institutions.

- **Develop intensive and coherent clinical experiences with frequent and comprehensive candidate supports.** Programs should allow candidates to expand and sharpen their skills and knowledge, as they apply the knowledge they gain in coursework in classrooms with young children; research indicates that clinical experiences are most likely to accomplish these goals when they are sustained, well-supported, and integrated with relevant coursework. States in this study ranged in the length of their supervised clinical experience requirements from the equivalent of 1 semester to a full year. Some states and preparation programs have created a full year of supervised clinical experience that allows them to connect coursework to clinical applications and to help candidates develop a strong repertoire of practices. This has been done at the state level in Louisiana and New Jersey and at the program level in institutions like Bank Street and CCNY. States that have low minimum requirements for supervised clinical experience can consider increasing the

required length or hours of clinical experiences for credentialing requirements. IHEs can provide candidates with a full year of supervised clinical experiences, even if it exceeds their state's minimum requirement.

In addition to providing guidelines for the amount of time spent in clinical settings, it is important that states and IHEs support productive and meaningful clinical experiences in strong partner schools that illustrate best practices, with frequent advising and opportunities for reflection. For example, Bank Street integrates observation and practicum experiences in most of their courses, requires regular meetings with clinical advisors, and provides mentoring and coaching opportunities for candidates throughout their clinical experiences. Boston College and Montclair require candidates to take an inquiry seminar throughout their supervised clinical experience placement to engage in collaborative reflection. State policymakers and IHEs can also make supervised clinical experiences more accessible and less burdensome by providing additional financial supports for student teaching through financial aid, stipends, apprenticeships, or residency models. Teacher residencies like the Newark Montclair Urban Teacher Residency and Louisiana Tech's undergraduate residency year are models for extended and coherent clinical experiences with closely integrated coursework that also provide financial supports.

- **Create, communicate, and support multiple pathways to an early childhood credential.** To make advanced certification more accessible, it is crucial to offer multiple pathways that attend to candidates' varying needs, especially those who need to work while completing their preparation. States can articulate multiple pathways in credentialing regulations and also invest in scaling up residencies, apprenticeships, and other pathways that allow candidates to work while completing their preparation. IHEs can also offer multiple pathways to earning an early childhood credential that attend to candidates' varying needs.

  To support access to the multiple pathways, state agencies, in partnership with IHEs, can develop outreach strategies to publicize information on credentialing requirements and the available pathways to a credential, providing information in multiple languages and modalities. New York City did this through resources that presented easy-to-digest information on pathways into early childhood or preschool classrooms for different roles. It also implemented advertising campaigns on public transportation. Additionally, IHEs can offer advising and mentoring to help candidates understand and navigate credentialing requirements.

- **Invest in building capacity for credentialing programs to design and implement accessible programs and provide candidate supports.** Informants from all states referenced a need for additional financial support for IHEs to develop strong early childhood educator preparation programs. States and IHEs can provide programs with resources to hire diverse faculty with appropriate expertise by funding graduate fellowships and targeted recruitment. States can also offer resources for developing rigorous ECE coursework, designing robust clinical experiences and mentorships, and tailoring program supports for ECE candidates. Upon creating its P–3 credential, New Jersey offered $13 million (over $21 million in 2022 dollars) in state grants for higher education capacity building to adequately serve early childhood educator candidates. The funds were specifically targeted toward hiring ECE faculty for P–3 credentialing programs.

Additionally, states can provide preparation programs with financial resources to offer convenient course locations, night or weekend courses, hybrid or online courses, and substitutes to accommodate candidates who are working as early childhood educators. IHEs can also use additional financial resources to offer robust advising, cohort models, or summer sessions so candidates can connect with classmates and faculty. For example, LA Tech offered summer orientation sessions to candidates, with the goal of each student having an established connection with a faculty member by the time courses began. Additionally, to promote program accessibility, Montclair State University offers hybrid courses as well as a satellite alternate route program that meets at community sites in the evening for classes.

- **Provide financial assistance to early childhood educators seeking higher credentials and degrees.** Given the persistently low wages in the ECE field, early childhood educators, particularly candidates of color, face significant financial barriers to completing coursework to earn early childhood permits, degrees, or credentials.[155] The low wages disproportionately affect potential candidates of color, who often come from the ECE field. States and IHEs can offer financial assistance and financial advising to help candidates access local, state, and federal funding. Financial assistance can include reduced tuition costs, scholarships, paid clinical experience, and coverage of incidental costs such as books, credentialing fees, child care, and transportation. States and IHEs use a variety of strategies to leverage funding sources to provide financial assistance: LA Tech uses donor funding to offer scholarships to prospective teachers, and during New York City's scale-up of universal prekindergarten, the New York Department of Education partnered with the City University of New York to implement tuition-free or subsidized B–2 credential programs to support candidates on expedited pathways.

- **Offer candidates multiple ways to meet credential requirements by crediting prior experience and addressing testing barriers.** Some credential candidates already have valuable teaching experience and education in ECE. States and IHEs can reduce barriers into the profession by developing methods for crediting candidates' previous experience, along with supervised classroom teaching, toward credential requirements. One common strategy is to allow classroom teaching to count toward required clinical experience hours. Massachusetts and New York both have policies to recognize candidate work experience. Another common strategy is to allow coursework or other evidence such as GPA to substitute for some licensure tests, such as subject matter competence. IHEs can also develop processes and staff capacity to determine whether candidates' prior work experience or coursework meets clinical or other content requirements.

  Additionally, interviewees reported that standardized credentialing exams were a common barrier preventing candidates from obtaining their early childhood credential. Accordingly, some states have been working to develop alternative assessments for candidates to demonstrate proficiency. For example, Massachusetts piloted performance-based alternative assessments for the required core skills and subject matter tests, including the use of essays and artifacts, to address barriers such as test pricing, structure, and duration. Some states incorporate performance assessments as part of the credentialing process. IHEs can also make sure that clinical experience and coursework are designed to support success on credential exams.

The state and city examples described in this study offer valuable lessons for policymakers in other states as they seek to develop or improve their early childhood credentialing systems. To monitor their success in serving candidates from diverse backgrounds and determine strategies for improvement, states can partner with IHEs to track credential candidate data such as demographics, previous education and experience, program enrollment and completion, and job placements. By setting up strong credentialing systems and offering supports to candidates and IHEs, states can develop highly skilled teachers capable of having positive, long-lasting impacts on young children.

In addition to these policy recommendations, we acknowledge that developing a high-quality, accessible, diverse early childhood educator pipeline requires broader, structural conditions fostered by state leadership buy-in, sustained financial investments, coordination across statewide systems and departments, and ongoing professional development to build skills in the classroom (including induction and early career mentoring programs). We also recognize that policies such as increased compensation, compensation parity across early education systems, and improved working conditions play a notable role in developing a high-quality early childhood educator pipeline.[156]

Conclusion

High-quality public preschool teaching can have positive and long-lasting impacts on children's academic achievement and life outcomes. To ensure teachers of young children have the knowledge and skills needed to support children's physical, social-emotional, and academic development, a large majority of states offer a credential focused on early childhood grades. However, the requirements for earning an early childhood credential and the structure of preparation programs leading to the credential vary considerably from state to state and from preparation program to preparation program. States have to make decisions about the age range covered in an early childhood credential, the content knowledge needed, and the clinical experience required to earn a credential. Institutions of higher education have to decide how to organize coursework and clinical experiences, the types of pathways to offer, and how to recruit and retain candidates for the credential. While there are many choices, the goal is similar: to prepare high-quality early educators who are capable of fostering the healthy development of children. The states and credentialing programs described in this report offer valuable strategies that policymakers and institutions of higher education can draw on for ensuring a racially, culturally, and linguistically diverse early education workforce that is well-prepared to meet the needs of the young children they teach.

Appendix A: State Credentials and Requirements

Table A1 summarizes the findings from our national scan of early childhood teaching credentials and for which teachers those credentials are required. We defined a stand-alone early childhood teaching credential as a credential that (1) can be obtained on its own (not only as an added authorization to another credential); (2) extends at least 1 year below kindergarten, and (3) focuses on early childhood, which we define as anywhere from birth through grade 3 (e.g., includes Preschool–3rd and Birth–2nd but not K–6 or PreK–5).

Table A1. State Credentials and Requirements

State	Early childhood credential(s)	Elementary credential(s)	Early childhood credential required for state-funded public PreK lead teachers?	Early childhood credential required for state-funded nonpublic PreK lead teachers?
Alabama	P–3	K–6, P–12	No	No
Alaska	PreK–3	K–6, K–8	Yes	No
Arizona	B–3	K–8	No	No
Arkansas	B–PreK	K–6	Yes	No
California	PreK–3	K–8	Some	No
Colorado	B–3	K–6	No	No
Connecticut	B–K, Nursery–3	1–6	Some	No
Delaware	B–2	K–6	No	No
District of Columbia	PreK–3	1–6	No	No
Florida	B–Age 4, PreK–3	K–6	No	No
Georgia	None	P–6	N/A	N/A
Hawaii	P–K, P–3	K–6	Yes	No
Idaho	B–3	K–8, 4–6	N/A	N/A
Illinois	B–2	1–6	No	No
Indiana	P–3	K–6	N/A	N/A
Iowa	PreK–3, B–3	1–6	Yes	Yes
Kansas	B–K, B–3	K–6	No	No
Kentucky	B–K	K–5	Yes	Yes
Louisiana	B–K, PreK–3	1–5	Yes	Some
Maine	B–K, PreK–3	K–6	Yes	Yes
Maryland	PreK–3	1–6	Yes	Yes
Massachusetts	PreK–2	1–6	Yes	No
Michigan	B–K, PreK–3	3–6	Some	Some
Minnesota	B–3	K–6	No	No
Mississippi	None	K–6	N/A	N/A

State	Early childhood credential(s)	Elementary credential(s)	Early childhood credential required for state-funded public PreK lead teachers?	Early childhood credential required for state-funded nonpublic PreK lead teachers?
Missouri	B–3	1–6	Some	No
Montana	P–3	K–8	N/A	N/A
Nebraska	B–3	K–6	No	No
Nevada	B–2	K–8	Yes	Yes
New Hampshire	B–3	K–6	N/A	N/A
New Jersey	P–3	K–6	Yes	Yes
New Mexico	B–PreK, PreK–3	K–8	Yes	No
New York	B–2	1–6	Yes	No
North Carolina	B–K	K–6	Yes	Yes
North Dakota	B–3, PreK–K	1–8	No	No
Ohio	PreK–3	PreK–5	No	No
Oklahoma	PreK–3	1–8	No	No
Oregon	None	PreK–12	N/A	N/A
Pennsylvania	None[a]	4–8	N/A	N/A
Rhode Island	PreK–2	1–6	Yes	No
South Carolina	PreK–3	2–6	No	No
South Dakota	B–3	K–4	N/A	N/A
Tennessee	PreK–3, PreK–K, B–K	K–5	Yes	No
Texas	PreK–3	Early Childhood–6	No	No
Utah	None	K–6, K–3	N/A	N/A
Vermont	B–K, PreK–3, B–3	K–6	Yes	No
Virginia	PreK–3	PreK–6	Yes	No
Washington	B–3	K–8	No	No
West Virginia	PreK–K	K–4, K–6	No	No
Wisconsin	B–3	K–9	Yes	Yes
Wyoming	B–K, B–3	K–6	N/A	N/A

[a] Pennsylvania offers a PK–4 teaching certificate that focuses on childhood, which is outside our definition of early childhood up to grade 3.

Notes: The terminology used in this table reflects each state's specific term for their early childhood credential. Data on credential requirements for public and nonpublic lead teachers were not applicable if a state did not have a statewide preschool program. Lead teacher credentialing requirements refer to statewide requirements for the publicly funded state preschool programs, including those offered in public school settings and nonpublic settings (private or community-based centers). States that do not have an early childhood credential or a statewide preschool program are categorized as "N/A" for lead teacher credentialing requirements. States categorized with "some" requirement had multiple state preschool programs and at least one program requiring an early childhood credential.

Sources: Friedman-Krauss, A. H., Barnett, W. S., Garver, K. A., Hodges, K. S., Weisenfeld, G., Gardiner, B. A., & Jost, T. M. (2022). *The state of preschool 2021: State preschool yearbook*. National Institute for Early Education Research; Analysis of state credentialing statutes and regulations by the Learning Policy Institute. (2023).

Appendix B: Study Participants

The following state credential administrators and preparation program staff participated in interviews.

Louisiana

- Christy Bellue, Director of Certification, Louisiana Department of Education
- Dustin Hebert, former Chair of the Department of Curriculum, Instruction, and Leadership, Louisiana Tech University
- Lydia Hill, former Director of Strategy and Policy, Office of Legislative and Policy Support, Louisiana Department of Education
- Katrina Jordan, Director and Associate Professor, School of Education, Northwestern State University

Massachusetts

- Brian Devine, Director of the Office of Educator Licensure, Massachusetts Department of Elementary and Secondary Education
- TeeAra Dias, Executive Director of the Early Childhood Office, Boston Public Schools
- Elizabeth Losee, Director of Educator Effectiveness Policy, Massachusetts Department of Elementary and Secondary Education
- Mariela Páez, Associate Professor at the Lynch School of Education, Boston College
- Lianna Pizzo, Associate Professor, College of Education and Human Development, University of Massachusetts Boston

New Jersey

- Tonya Coston, former Deputy Assistant Commissioner, Division of Early Childhood Education, New Jersey Department of Education
- Joanne Cote-Bonanno, Associate Provost for Academic Programs and Assessment, Montclair State University
- Elizabeth Erwin, Professor, Teaching and Learning, Montclair State University
- Elizabeth Fernandez-Vina, former Deputy Director of the Office of Recruitment, Preparation, and Recognition, New Jersey Department of Education
- Kim Friddell, Director of the Office of Preschool Education, New Jersey Department of Education
- Mia Kirk, Supervisor, Alternate Route Teacher Education Program, Montclair State University
- Gina Martino, Field Experience Coordinator, Center of Pedagogy, Montclair State University
- Caroline Murray, Assistant Director, Center of Pedagogy, Montclair State University

- Victoria Puig, Associate Professor, Teaching and Learning, Montclair State University
- Jennifer Robinson, former Director, Center of Pedagogy, Montclair State University
- Sharon Ryan, Professor of Early Childhood Education, Rutgers University
- Minsun Shin, Professor, Teaching and Learning, Montclair State University
- Linda Wise, Chairperson of the Department of Teaching and Learning, Montclair State University

New York

- Marjorie Brickley, Supervised Fieldwork Advisor and Course Instructor and Coordinator of the Infancy Institute, Bank Street Graduate School of Education
- Jessica Charles, Associate Dean of Research and Innovation, Bank Street Graduate School of Education
- Sherry Cleary, former Dean of Early Childhood Initiatives, City University of New York (CUNY), and Executive Director, CUNY's New York Early Childhood Professional Development Institute
- Beverly Falk, Professor and Director Emerita, Graduate Programs in Early Childhood Education, The City College of New York
- Lillian Fincher, former Early Childhood Education Administrator, Division of Early Childhood Education, New York City Department of Education
- Laura Glass, Senior Policy Advisor, Office of Higher Education, New York State Education Department
- Marie Irving, Associate, Office of College and University Evaluation, New York State Education Department
- Peggy McNamara, Senior Director of Student Learning Support and Community Initiatives, Bank Street Graduate School of Education
- William Murphy, Deputy Commissioner for Higher Education, New York State Education Department
- Patricia Oleaga, Project Assistant, Office of College and University Evaluation, New York State Education Department
- Soyoung Park, Director of Early Childhood Special Education Programs, Bank Street Graduate School of Education

Appendix C: Methodology

Selection Criteria and General Methodology

We selected four states—Louisiana, Massachusetts, New Jersey, and New York—to understand the different approaches states take to early childhood teacher credentialing. This selection was based on the following criteria:

- The state has at least one stand-alone early childhood credential and requires lead teachers to obtain this credential to teach in public preschool settings.
- State credential requirements are aligned with the components of high-quality early childhood educator preparation that are considered essential for success, including foundational knowledge in child development and opportunities for clinical practice.
- Evidence exists on the quality of the state's preschool program (determined by evaluation data and/or the National Institute for Early Education Research State of Preschool Yearbook quality standards).
- At least one state had:
  - a credential that was implemented in the past 5–10 years (Louisiana);
  - a rapidly scaled preschool on a large scale (Massachusetts, New Jersey, New York);
  - an explicit focus on the racial and ethnic diversity of the workforce (Massachusetts, New Jersey, New York); and
  - a focus on supporting the preparation of the workforce in rural areas (Louisiana).

Within each state, we selected two institutions of higher education (IHEs) operating one or more P–3 (or similar) credentialing programs. Program selection was based on background research and information gathered during the initial interviews with state-level credential administrators. We selected the IHEs to ensure that (1) at least one IHE in each state was a public institution, and (2) at least one of the following types of credentialing programs across all eight IHEs was included in this study:

- IHE(s) implementing teacher preparation programs at the baccalaureate and postbaccalaureate levels;
- IHE(s) with an emphasis on recruiting and increasing accessibility for teachers from racially, linguistically, and culturally diverse backgrounds;
- IHE(s) implementing expedited credentialing programs for current early childhood educators who were not yet credentialed;
- IHE(s) implementing online or hybrid models;
- IHE(s) whose teacher preparation program(s) placed an emphasis on multilingual or dual language learners;
- IHE(s) implementing residency models; and

- IHE(s) implementing dual certification models in bilingual or special education.

Based on these criteria, we selected the following states and IHEs, each of which has multiple early childhood teaching credential programs, both traditional and alternate pathways:

- Louisiana: Louisiana Tech University (LA Tech), Northwestern State University (Northwestern State)
- Massachusetts: Boston College, University of Massachusetts Boston (UMass Boston)
- New Jersey: Montclair State University (Montclair), Rutgers University–New Brunswick (Rutgers)
- New York: Bank Street College of Education (Bank Street), City College of New York (CCNY)

We gathered data through a series of 30- to 60-minute interviews with state credential administrators and preparation program staff in fall 2021 through spring 2022, as well as through document review of state policies, credentialing data, and preparation program materials, including course descriptions. Where available, we also collected data on program effectiveness and the racial/ethnic demographics of enrollees and completers, but these data were not available in the majority of preparation programs, either because the information was not collected or due to the data privacy issues that arise with very small groups.

Estimated Title II Completion Rates

In order to calculate student completion rates for each of the IHEs studied, we relied on national teacher preparation data provided by the U.S. Department of Education's Title II reports. During the Title II reporting process, states and jurisdictions submit Institution and Program Report Card data to the U.S. Department of Education annually by October 30.

For this reporting, states count IHEs offering both "traditional" and "alternative" route teacher preparation programs as two distinct teacher preparation providers. Title II reporting defines traditional teacher preparation providers as those that typically offer undergraduate programs and often attract individuals who enter college with the goal of becoming a teacher. Alternative teacher preparation providers often serve candidates who are the teacher of record in a classroom while participating in the program, often attracting candidates who already hold a bachelor's degree in a specific content area. Alternative routes to a teaching credential are defined as such by the state and vary by state.

Using Title II reports from the four most recently available academic years (2017–18 to 2020–21), we calculated the average number of enrolled candidates in both traditional and alternative teacher preparation programs at each IHE studied. We then divided this number by the average length of these programs (e.g., 2, 3, or 4 years) to calculate the average number of candidates enrolled each year. Finally, we divided the number of most recent program completers (2020–21) by the average number of candidates enrolled each year to calculate the current completion rate. In 2018–19, Title II changed its definition of enrollees to include both enrolled and completing candidates (in prior years, they were reported separately). As a result, for the 2017–18 data, completing candidates were added to the enrollee count in order to get a total count of enrollees consistent with the following years. No adjustments were needed for the data from 2018 and afterward.

Next, we detail the specific calculations for each IHE:

- LA Tech: We divided the traditional enrollment by 3 (years) because most undergraduate candidates do not officially enroll in LA Tech's teacher preparation programs (and thus are not included in enrollment counts) until their second or third year. We divided the alternative enrollment by 2 years because this is the typical length of LA Tech's MAT program.
- Northwestern State: We divided the Title II traditional and alternative total enrollments by 3.5 (years) because we assumed the former included bachelor's and postbaccalaureate or master's programs, while the latter accounts for candidates enrolled part-time in certification-only and practitioner teacher programs.
- Boston College: All of Boston College's ECE programs were categorized as traditional; thus, we had no alternative completion rate. We divided the traditional enrollment by 3 (years) to account for candidates who were enrolled part-time in master's or postbaccalaureate programs.
- UMass Boston: All of UMass Boston's ECE programs were categorized as traditional in the Title II data; thus, we had no alternative completion rate. We divided the traditional enrollment by 3 (years) to account for candidates who were enrolled part-time in master's or postbaccalaureate programs.
- Montclair: We divided the traditional enrollment by 3 (years) because most undergraduate candidates do not officially enroll in Montclair's preparation (and thus are not included in enrollment counts) until their second or third year. We divided the alternative enrollment by 2 (years) because Montclair's alternative programs include a nondegree Modified Alternate Route Certification Program, which was designed to be completed in 2 years.
- Rutgers: We divided the traditional enrollment by 2 (years) because the dual degree and certification teacher preparation programs are designed to take 5 years; however, their candidates are not reported as enrolled in the programs until their final year as an undergraduate.
- Bank Street: We divided the traditional enrollment by 5 (years) because Bank Street is a graduate school and provides only master's degree programs, many of which are completed by candidates on a part-time basis.
- CCNY: We divided the traditional enrollment by 3.5 (years) because this program includes many bachelor's candidates who are enrolled during their first year. We divided the alternative enrollment by 3 years to account for full- and part-time postbaccalaureate and master's candidates.

Appendix D: Bank Street Graduate School of Education's Early Childhood General Education B–2 Master of Science in Education Program Profile

Institutional Overview

Located on the Upper West Side of New York City, Bank Street was originally founded as the Bureau of Educational Experiments (BEE) in 1916, with the goal of combining psychological awareness with democratic conceptions of education.[157] Initially, the BEE focused on research, clinical studies, and children's literature, but in 1930, it established the Cooperative School for Student Teachers to begin preparing teachers. In 1950, the BEE changed its name to Bank Street College of Education and began offering teaching credential and master's degree programs in a range of areas and specializations.

Bank Street houses Bank Street Graduate School of Education's teacher preparation pathways, offering academic programs spanning birth to adolescence and providing exclusively graduate-level educator and leader preparation programs.[158] Bank Street takes a "developmental-interaction approach" to progressive education, which recognizes that "all individuals learn best when they are actively engaged with materials, ideas, and people" and that "authentic growth requires diverse and nurturing opportunities for ongoing social, emotional, and cognitive development."[159]

Bank Street offers a variety of Master of Science in Education programs in Early Childhood Education, including programs focused on general and special education, dual language/bilingual education, and infant and family development. Each of the early childhood educator preparation programs results in an Initial or Professional Early Childhood Education (Birth–Grade 2) certification, depending on candidates' teaching experience upon entering the programs.

Bank Street offers the following postbaccalaureate programs for leading to a B–2 credential:

- Early Childhood General Education B–2 (MSEd)
- Early Childhood Special and General Education Dual Certification (MSEd)
- Dual Language/Bilingual Early Childhood Special and General Education B–2 (MSEd)
- Infant and Family Development and Early Intervention/Early Childhood Special and General Education B–2 (MSEd)
- Early Childhood General Education Advanced Standing B–2 (MSEd)
- Early Childhood Urban Education Initiative (MSEd)
- Early Childhood Educator Residency Model (ongoing and rotating partnerships with multiple districts)

This profile will focus on Bank Street's Early Childhood General Education B–2 program, which is the core program that forms the basis for other tailored pathways.

Scale-Up of Universal Prekindergarten in New York City

Bank Street was a key partner in the implementation and scale-up of New York City's Pre-K for All, and its early childhood educator pathways serve as an example of how institutions of higher education can work in tandem with city and state agencies to support early childhood policy implementation.

In 2014, the New York City Department of Education (NYC DOE) began implementing Pre-K for All, its universal preschool program for 4-year-olds within both public school-based and community settings. This initiative began expanding to include 3-year-olds in 2017.

The expansion of universal preschool greatly increased the demand for credentialed early childhood educators within the city, resulting in a partnership between NYC DOE and Bank Street, along with other local universities. Bank Street worked with NYC DOE to communicate information on pathways into the ECE workforce and recruit early childhood teacher candidates.

Additionally, to improve accessibility of pathways, Bank Street initially partnered with the NYC DOE to subsidize the cost of coursework for not-yet-credentialed preschool teachers. Bank Street has continued this financial support through private funding sources, offsetting the tuition costs for its candidates.

Early Childhood General Education B–2 Program

The Early Childhood General Education B–2 program provides candidates with a foundation in child development through observation and engagement in active learning, culminating in a Master of Science in Education.[160] Upon graduating and passing the Content Specialty Multi-Subject: Teachers of Early Childhood and Educating All Candidates exams, graduates are recommended for a B–2 certification in Early Childhood General Education.

Candidates

Bank Street's Early Childhood Education teacher candidates come from a variety of settings: Many are career changers or have some experience working in community-based child care centers.[161] The Early Childhood General Education B–2 master's program enables candidates to complete their supervised clinical experience where they are already employed but is otherwise more generally geared toward recent college graduates.

Bank Street notes that the program leads to career growth and opportunities for a variety of candidates: Graduates can secure head or assistant teaching positions in public, charter, and independent schools in New York City or beyond; current assistant teachers can move into head teacher positions; and head teachers may develop more leadership roles within their schools.[162]

In fall 2021, Bank Street had a total enrollment of 635 postgraduate candidates.[163] Across all programs, 39% of Bank Street's candidates were White, 21% Hispanic or Latino, 16% Black/African American, 16% race unknown, and 5% Asian. The same candidates were 88% female and 12% male.[164] An estimated 92% of Bank Street's candidates complete their preparation pathway.[165]

During the 2020–21 school year, Bank Street graduated 49 candidates across all its Early Childhood Education and Teaching master's degree programs.[166] In the 2021–22 school year, it graduated 30.

Admissions and Selection

Bank Street uses a personalized and focused process for student selection, reviewing multiple forms of evidence that provide information about candidates' experiences, views, and preparation.[167] In addition to previous academic records and personal references, applicants are required to submit a written application form that includes questions designed to let the college understand the candidate as a potential teacher. Candidates must also write an autobiographical essay that describes events they feel influenced their decision to enter the field of education. Finally, upon making it through initial screening, candidates participate in an interview with the program director or one of the program advisors.

Bank Street states the following admissions criteria for all its programs:[168]

- a GPA of 3.0 (B average) or higher in an undergraduate degree program from a regionally accredited college or university
- an aptitude for completing graduate-level coursework and academic projects of substantial scope and breadth, as well as a capacity for making positive contributions in their professional life
- sensitivity to others, flexibility, self-awareness, and a willingness and capacity to engage in self-reflection
- positive interpersonal skills in relationships with both children and adults
- a healthy motivation and commitment to learning, children, and young adults

For applicants seeking their first teaching certification, Bank Street seeks "breadth and depth" in liberal arts and sciences, requiring at least 10 courses in one liberal arts and science major or area of concentration.[169] If an applicant is missing a course prerequisite, they need to complete a course in the required subject(s) within their first year at Bank Street.

Faculty and Advising

As of fall 2021, Bank Street had 24 full-time and 19 part-time faculty dedicated to instruction.[170]

The Early Childhood General Education B–2 program is staffed with three faculty members: the codirector of Early Childhood Programs, an advisor/instructor, and a supervised fieldwork advisor and course instructor. Each of these faculty members also serves as staff in two other academic programs.[171]

Bank Street offers intensive advising for all prospective teachers, providing regular classroom observations, individual meetings with a faculty advisor, and a weekly collaborative conference group with peers. Advisors serve as both supporters and evaluators of candidates as they progress through the program.[172] Through the observations and meetings, advisors set goals with candidates to help monitor their progress. If a candidate does not seem to be progressing, they will have a conference with their advisor and chair to determine what changes and supports are needed.

Additionally, faculty offer advising supports to help candidates navigate the B–2 credential testing requirements. Through advising and peer sharing, program administrators at Bank Street help candidates understand the content in the state-required exams, reduce test-related anxiety, and increase their

confidence in their knowledge and skills. Peggy McNamara, Senior Director of Student Learning Support and Community Initiatives and lead of the Bank Street Early Childhood Urban Education Initiative, described their approach:

> Meeting with [candidates] and talking about what the exam is, encouraging them that they know what's in that exam based on the courses that they've taken. … And being in the cohort has been helpful because initially they're not confident about taking the exams, but then, when one takes them and does OK, then that person says, "This is what it is," and then the others say, "I can too."[173]

Design of Coursework and Integrated Field-Based Experiences

The Bank Street Early Childhood General Education Program requires 45 semester credits for completion, resulting in both a B–2 certification and a Master of Science in Education (see Table D1). It is designed as a three-year program, since many candidates are concurrently working teachers; however, progression through the program depends on individual candidates and can take longer than 3 years.[174]

Bank Street views teachers as facilitators of learning in classrooms. Coursework offers candidates deep understanding of theory, combined with opportunities for observation and reflection.[175] Candidates engage in coursework that spans across foundational educational and child development theory as well as practical topics in pedagogy and subject matter. Content and pedagogy coursework lead into a yearlong clinical experience where candidates have intensive supervision and advising while reflecting on theory and practice.

Table D1. Bank Street Early Childhood General Education Course Requirements

Required Courses
Child Development
Language Acquisition and Learning in a Linguistically Diverse Society
Foundations of Modern Education
Science for Teachers (Grades N–6) OR Science Inquiry for Children in the Natural Environment
Mathematics for Teachers in Diverse and Inclusive Educational Settings (Grades N–6)
The Teaching of Reading, Writing, and Language Arts in the Primary Grades
Language, Literature, and Emergent Literacy in the Primary Grades
Arts Workshop for Teachers OR Music and Movement

Required Courses
Curriculum in Early Childhood Education OR Curriculum in Early Childhood Education for Inclusive and Special Education Settings
Family, Child, and Teacher Interaction in Diverse and Inclusive Educational Settings
Teaching Students With Disabilities: An Introduction to Disability Theory, Disability Law, and Responsive Practices
The Study of Children in Diverse and Inclusive Settings Through Observation and Recording
Supervised Fieldwork/Advisement (Fall)
Supervised Fieldwork/Advisement (Spring)
Extended Field Experiences *(for candidates completing supervised clinical experience as head or assistant teachers)*

Note: N = Nursery

Source: Bank Street Graduate School of Education. (n.d.). *Early Childhood General Education course requirements* (accessed 01/13/2025).

Bank Street itself does not dictate or suggest a specific sequence of coursework; instead, course selection and sequencing is planned by the student in consultation with a program director or advisor.[176] This course flexibility allows candidates to build their program in a way that fits their learning style and needs, and they can adjust their course schedules to their personal and professional obligations. For candidates navigating various commitments or who cannot afford full-time tuition, this flexibility can help them persist through the program while maintaining faculty relationships and support. Many Bank Street courses strive for teacher candidates to engage deeply with course content: Rather than structure courses around an end-of-semester exam, candidates are often given assignments that are designed to build on one another throughout the semester, promote active reflection, and include lesson plans or strategies for them to use directly with students.[177]

Additionally, Bank Street integrates observation and field-based learning experiences in most of their courses, offering teachers the opportunity to observe and work with a variety of age groups between birth and 2nd grade.[178] These observation and practicum experiences are designed to allow candidates to develop strong connections between theory and practice, and these connections continue as candidates move into student teaching.[179]

Supervised Field Placement

At the time of initial data collection for this study, New York State required 40 days of full-time supervised clinical experience divided across three age bands: prekindergarten, kindergarten, and 1st or 2nd grade. Bank Street chose to exceed New York State requirements for its preparation program, requiring 2 semesters of full-time supervised clinical experience so that student teachers could gain more exposure

to classroom environments and experience more sustained fieldwork and advising. New York State has since adjusted its supervised clinical experience requirement, increasing it from 40 days to 70 days for candidates who entered a program beginning in fall 2024.[180]

Candidates can complete supervised clinical experience as either a student teacher or working teacher. Allowing candidates the flexibility of counting their full-time position in an early childhood setting as supervised field placement reduces the financial burdens of seeking a B–2 credential, as working candidates can maintain a full-time income while still receiving credits, supervision, and advising supports.

Student teachers have three placements across the three required age bands (prekindergarten, kindergarten, and 1st or 2nd grade) in public, independent, or child care settings across New York City. Teachers completing their field experience in their place of employment must begin their field experience in the fall and complete it during the academic year. However, program faculty noted that the three-grade-span requirement could be a barrier for current working teachers who need to take time off to student teach in additional grades in other programs.

Partnering With Schools and Teachers for Supervised Field Placement

Preparation program faculty work in partnership with schools to select placements and cooperating teachers who are committed to educating a student teacher. Supervised field placements must be approved by both Bank Street's program director *and* the school's principal or director to ensure candidates will be in classrooms where they can observe and lead student-centered, project-based instruction.

Bank Street provides partnering schools with criteria for the selection of cooperating teachers to ensure that candidates learn from teachers who share Bank Street's developmental approach. Cooperating teachers must want a student teacher, engage in weekly meetings with the student teacher, meet with both the student teacher and faculty advisor once a month, be strong in curriculum and classroom management, be able to articulate their practice and answer student teachers' questions, and be willing to give substantial responsibility to the student teacher planning and implementing instruction across subject matter.[181] To ensure cooperating teachers meet these criteria, Bank Street faculty visit public and private schools to observe potential cooperating teachers and assess their fit for student teachers. Because many of the partnering schools employ teachers who have received training and education through Bank Street, they are able to provide rich training environments for student teacher placements that align with Bank Street's approach to coursework and pedagogy.

While Bank Street has strong, reciprocal relationships with many schools across New York City, both faculty and candidates cite challenges with finding teachers and schools that reflect Bank Street's educational approach and the diversity of New York.[182] Faculty note that Bank Street's criteria for finding teachers who have both a progressive approach to education and the time to work with a student teacher have moved Bank Street's partnerships closer to the private sector rather than public schools: Bank Street provides many of its field placements and classroom observations at the Bank Street School for Children, a private lab school connected to the college created by Bank Street's founders to practice and develop their educational model. Some Bank Street candidates have also expressed concerns with the lack of diversity in field placements, as the schools selected for partnership are often exemplars of

progressive education and may not provide candidates with the chance to work through challenges often faced in high-need schools.[183] Bank Street faculty are working on addressing this challenge by expanding their partnerships.

Clinical Supervision and Mentoring

Supervised clinical experience and advisement are at the heart of a Bank Street education, and graduate candidates are given opportunities to connect theory to practice and reflect on their own growth with faculty and peers.[184] Candidates are provided with multiple opportunities to reflect on their teaching in scaffolded settings with their advisors or peers. All candidates are assigned a faculty advisor for their supervised field experiences. Faculty advisors conduct monthly observation visits to fieldwork sites and engage in at least two meetings per month with candidates, offering mentoring and coaching opportunities for candidates throughout their clinical experiences.

After each monthly observation, advisors meet one-on-one with the candidate to reflect on the lesson, allowing the student to self-assess and develop their own problem-solving skills and resourcefulness. Rather than having advisors jump in and give a specific strategy, they take an inquiry approach, allowing candidates to take control of their learning and understand that appropriate changes are dependent upon context.[185]

Additionally, candidates have weekly conference group meetings with their advisor and a small cohort of peers to engage in reflective inquiry and to discuss issues they face within their placements. These weekly conference groups are considered a core component of the supervised clinical experience at Bank Street. Candidates are able to reflect with peers in a confidential setting, as well as apply their coursework material to their teaching practice. Bank Street chooses to exceed the state's supervision caseload expectations by capping conference groups at five to seven candidates to provide for more intensive advising related to the clinical experience. According to program faculty, this decision has allowed fieldwork supervisors to develop stronger relationships with their candidates and engage their candidates in critical reflective processes.

Marjorie Brickley, Supervised Fieldwork Advisor and Course Instructor and Coordinator of the Infancy Institute at Bank Street, stressed the impact that smaller conference groups can have on student teacher development:

> Unless you intimately know [a student's] setting, you're really not effecting any kind of change....The reflective process that we use is to help people understand who they are as teachers...and you can't do that in a group of 30 people that meet for an hour. Smaller groups and more intense supervision are really what people need, because otherwise, they default to whatever it is their cooperating teacher is thinking and doing, and they just become a carbon copy of what they've seen.[186]

These smaller conference groups and one-on-one advising are designed to promote Bank Street's emphasis on reflective inquiry in teacher development. Brickley explained that having the intensive supervision and engagement reflective processes allows candidates to "really question [their practice] and think deeply about what they are doing."

Conclusion

Bank Street's Early Childhood Education B–2 Program has two noteworthy qualities that offer insights into how preparation programs can provide high-quality teacher preparation while also promoting program accessibility.

The first is Bank Street's commitment to meaningful clinical experiences. This is apparent across multiple elements of both field-based experiences by teaching content in concert with field-based experiences and by designing sustained and intensive supervised clinical practicums. In addition to exceeding New York's credentialing requirements by lengthening placements to 2 semesters, Bank Street caps field supervision caseloads at seven candidates per supervisor, is careful in the selection of partnership schools that serve as strong models of practice, and provides intensive supervision and support in other ways as well.

Additionally, Bank Street helps make an early childhood education degree accessible to candidates from a variety of backgrounds, including those who are changing careers or working in child care settings. The school provides financial support, program flexibility (such as allowing candidates to do most of their supervised field practicum where they serve as a teacher), and ongoing advising. These supports are especially crucial for diversifying New York's early childhood educator workforce, as obstacles such as tuition costs, competing commitments, and difficulty navigating higher education systems are more likely to negatively impact candidates of color than other candidates.[187]

Appendix E: Montclair State University's Newark Montclair Urban Teacher Residency and Early Childhood Education Bachelor of Arts Program Profile

Institutional Overview

Montclair State University was established in 1908 as a 2-year teachers college in response to growing demand for professionally trained teachers.[188] Since then, Montclair has become an internationally recognized institution for the preparation of high-quality teachers and the improvement of education.[189] In an effort to ensure diversity among its student body, the university's Strategic Plan 2025 calls for achieving racial and ethnic diversity levels among students that match those of 18- to 24-year-olds in the state.[190]

Montclair offers the following baccalaureate and postbaccalaureate programs for receiving a P–3 credential:

- Early Childhood Education P–3 (BA)
- Early Childhood Education P–3 (MAT)
- Dual Certification: P–3 and Teacher of Students With Disabilities (MAT)
- Teacher of Preschool Through Grade Three (nondegree, certification only)
- Nondegree Modified Alternate Route P–3 Certification Program
- Newark Montclair Urban Teacher Residency – Teacher certification in Early Childhood (P–3)/ Special Education

The rest of this section provides general information about all of Montclair's pathways. We then focus on two of the programs: (1) the Newark Montclair Urban Teacher Residency Program—Early Childhood/ Special Education Masters in the Art of Teaching pathway, and (2) the Early Childhood Education Bachelor of Arts Program.

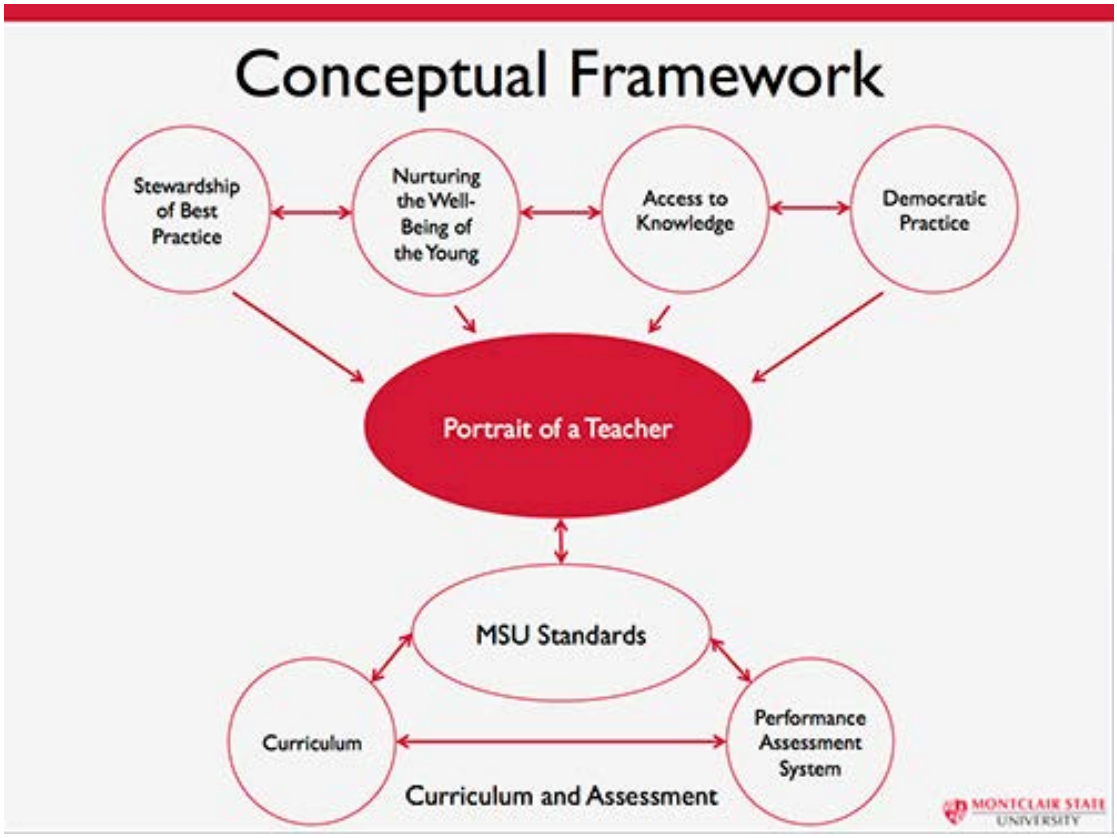
Montclair's Early Childhood Education Bachelor of Arts, Master of Arts in Teaching, dual degree, and alternative route certification programs are housed in its College for Education and Engaged Learning's Department of Teaching and Learning.[191] Each program offers a provisional P–3 teaching credential. As of fall 2023, Montclair had 32 full-time and 18 adjunct faculty in its Department of Teaching and Learning.[192]

Despite its size and multiple programs, Montclair maintains coherence across the multiple pathways of its teacher education program by grouping them under a unique organizational structure named the Center of Pedagogy, which was established in 1995. The Center coordinates all aspects of teacher education as well as Montclair's partnership network, grant-funded initiatives, and faculty professional development. To support this holistic approach, the Center engages faculty and staff from the College for Education and Engaged Learning, the arts and sciences, and Montclair's network of partner schools, an inclusionary arrangement known as the "Tripartite." The Center was created to oversee and create cohesion among all the organizations and work related to the preparation of teachers. As such, the Center houses a number

of administrative programs and offices, including the Montclair State University Network for Educational Renewal (MSUNER), the Office of Admissions and Retention, the Office of Clinical Internships, the Teacher Education Advocacy Center, and the Newark Montclair Urban Teacher Residency (NMUTR). A full-time director and deputy director oversee the work of the center.[193]

The Center relies on a clear, comprehensive, and coherent vision articulated in a conceptual framework, referred to as the Portrait of a Teacher, that guides the policies and practices of its programs and aligns decisions with programmatic standards, curriculum, and assessments (see Figure E1). The conceptual model provides a common vision for all of Montclair's credential pathways.

Figure E1. Montclair State University Teacher Preparation Conceptual Framework



Source: Montclair State University. (2022).

The Portrait of a Teacher consists of six statements that describe Montclair's commitment to preparing educators for a multicultural and democratic society.[194] According to the model, educators:

1. Have expert knowledge of subject area content and relevant pedagogy.
2. Understand learning and development as complex processes that take place across the lifespan.
3. Apply knowledge of learners, disciplinary content, pedagogy, and assessment to teach effectively.
4. Create democratic learning communities that are engaging, caring, respectful, and inclusive.

5. Embrace leadership roles to create collaborative partnerships with school colleagues, families, and agencies in the community to support students' learning and well-being.
6. Demonstrate dispositions that are critical to the teaching profession.

The Portrait is used to guide the program admissions as well as candidates' assessment throughout the program. Tamara Lucas, Dean of the College for Education and Human Services, noted that "by the last semester teacher candidates are assessed on all components of the Portrait."[195] The Portrait is also employed in the evaluation of cooperating teachers and supervisors and integrated into Montclair's Standards for Initial Teacher Programs.

The alignment of different pathways is further bolstered by the use of common standards. The Montclair Standards for Initial Teacher Programs bring together the program's vision of what teachers should know and be able to do in an actionable framework organized into seven areas:[196]

1. Knowledge of content and pedagogy
2. Understanding of learning and development
3. Instructional planning
4. Implementing instruction
5. Learning communities
6. Leadership and collaboration
7. Professional dispositions

Partnering With Schools for Supervised Clinical Placements

The Montclair State University Network for Educational Renewal (MSUNER) coordinates with all partner districts. While part of this work is administrative, the core work of MSUNER is to foster relationships between Montclair and partner districts to support the work of effective teacher preparation.

To become a district partner, districts must go through an application process that includes a site visit by Montclair faculty to ensure that teaching practices in the school align with their conception of teacher preparation for deeper learning. Once a district becomes a part of the network, they have access to a wide array of resources. Every district that joins the network pays dues, makes a commitment to the Center of Pedagogy's mission and goals, and promises to give Montclair teacher candidates priority in placements. Montclair offers teachers and leaders at partner districts opportunities to participate in professional development and technology workshops, conferences, teacher study groups, and action research teams, and they are eligible to receive small grants to work on specific short-term projects. School-based clinical faculty members serve on committees and task forces at the university that focus on the renewal and development of teacher preparation. Over 11,000 teachers and leaders in the network have access to professional development activities provided through MSUNER by Montclair faculty.

For teachers who want to serve as mentor teachers to Montclair teacher candidates, there are tailored professional development opportunities. To ensure that mentor teachers have the knowledge and skills to support candidate learning aligned with the Portrait of a Teacher, partner district teachers can apply to be clinical faculty members for Montclair. To obtain clinical faculty status, teachers must complete an application and submit a letter of recommendation. If accepted, during the first 2 years as a clinical faculty member, teachers are required to take three MSUNER minicourses: Teaching for Critical Thinking,

Culturally Responsive Teaching and Equity, and Mentoring and Coaching Strategies. All of these courses are free to educators in member districts and offered after school hours. After completing these requirements, clinical faculty members are eligible to:[197]

- coteach student-teaching seminars on campus or on-site;
- teach in the MSUNER professional development series;
- attend the yearly MSUNER Summer Conference;
- apply for grants that foster professional development, curriculum development, and/or research; and
- apply for campus privileges including a Net ID, campus parking, library privileges, and the use of the ADP Center for Learning Technologies at Montclair.

Recruitment and Admissions

For all of its credentialing pathways, Montclair recruits broadly through informational recruitment materials and presentations, as well as directly via early childhood conferences and district outreach, particularly through their network of schools through MSUNER.[198]

Montclair has baccalaureate, postbaccalaureate, and nondegree pathways toward the P–3 teaching credential. For admission into its undergraduate program, Montclair heavily emphasizes candidates' academic performance in high school, including their grade point averages and the rigor of courses taken.[199] Submission of SAT or ACT scores is optional, but if submitted, scores will be considered in the admissions process. Admission into all of Montclair's postbaccalaureate certification pathways requires the equivalent of a U.S. bachelor's degree; college transcripts; submission of either Praxis I, SAT, ACT, or GRE scores; and an essay.[200] The Modified Alternate Route is the only pathway that requires applicants to submit both Praxis I and Praxis II exam scores, though the Urban Teacher Residency highly encourages applicants to submit Praxis II.[201] All programs except the Urban Teacher Residency, ask applicants to submit an essay related to the Portrait of a Teacher. The Urban Teacher Residency requires applicants to submit a personal statement that includes a prompt on how candidates are committed to social justice and antiracism; additionally, Urban Teacher Residency applicants must have a minimum undergraduate GPA of 2.75 and 30 course credits in the subject field of interest.[202]

Enrollment and Demographics

In the 2017–18 school year, 384 Montclair candidates completed either an undergraduate or graduate program leading to teacher certification. Of these, 50 were certified as P–3 teachers.[203] In 2019, 69% of completers of all Montclair teacher preparation programs were White, 10% two or more races, 6% Asian, 5% Hispanic or Latino, 5% Black/African American, and 1% Native Hawaiian or Pacific Islander. Five percent did not report their race. Among the same pool, 76% were female and 24% were male.[204] Overall, an estimated 82% of Montclair teacher candidates complete their traditional Montclair teacher certification programs, and about 83% of the alternative route candidates successfully complete the programs.[205]

Assessment

As part of a formative evaluation of all of their preparation programs' effectiveness, Montclair collected survey data from graduates and employers of graduates from 2011–2015 on perceptions of teaching preparedness. Over 80% of the alumni from all preparation pathways who responded to the survey

reported being "well" or "exceptionally well" prepared. While employer ratings were below those of the graduates, 70% or more of responding employers reported positive perceptions of candidates across four of the five areas of preparation assessed.[206]

Newark Montclair Urban Teacher Residency Program—Early Childhood/Special Education

Montclair State University has established a residency program through an ongoing partnership with Newark Public Schools (NPS). The Newark Montclair Urban Teacher Residency program offers an initial teacher certification for college graduates and career changers with bachelor degrees who share a deep commitment to urban education. This partnership was formed to prepare teachers to work in high-need or shortage areas (e.g., schools with high numbers of children with special needs, shortages of math and science teachers). As a result, candidates can pursue a Master of Arts in Teaching (MAT) with dual teacher certification as a Teacher of Students with Disabilities (TSD), combined with Early Childhood (P–3), Elementary (K–6), or a P–12 subject area.

Consistent with research on common features of effective teacher residency programs, the 18-month Newark Montclair Urban Teacher Residency provides coursework in a cohort-style environment of no more than 15 candidates.[207] It also provides program graduates with intensive induction support, mentoring, and professional development through their first 3 years of teaching. Program participants receive a stipend of $44,000 during the initial 12 months of the program to help cover the cost of tuition and living expenses throughout the program. Upon completion, residents are required to make a 3-year commitment to teach within the Newark or Orange public school systems, and they receive support to find such employment.[208]

Since the establishment of the residency, teacher evaluation data, including a combination of observations of teacher practice and student achievement,[209] have shown that 100% of Newark Montclair Urban Teacher residents are rated as effective or highly effective upon program completion.[210]

Design of Coursework and Clinical Experiences

Across preparation programs, Montclair has created a curriculum for teacher candidates that integrates theory and practice and helps candidates incorporate what they are learning about children, content, and pedagogy. The coursework is designed around research-based teaching and learning theories that are then explored and applied in fieldwork experiences. This coupling of coursework and field experiences is intentional and is evident in the undergraduate and graduate course sequence. As is evident in Table E1, candidates take a range of courses covering inclusive early childhood educational practices, perspectives on disability and early childhood education, early language and literacy development, and family engagement.

As articulated in Montclair's portrait of a teacher, one skill that candidates should have is to be able to "apply knowledge of learners, disciplinary content, pedagogy, and assessment to teach effectively."[211] To help candidates develop this skill, coursework includes field-based assignments that ask candidates to recognize, describe, and analyze others' practice in education settings based on their pedagogical and content knowledge. Residents are also supported to examine and reflect on their own experiences in early education classrooms. For example, a 25-hour field-based assignment at a partner elementary school is a major requirement for the course Perspectives on Early Childhood Education in a Diverse Society. The field-based assignment requires candidates to (a) attend a school orientation session; (b) complete an

observation while shadowing an assigned teacher for 1 day assessing classroom climate, content, teaching and pedagogy, assessment and evaluation, and family and community involvement; (c) attend two school-based meetings (e.g., a grade -level team meeting, faculty meeting, or professional development training and a school board meeting); (d) complete 15 hours of community service with the partner school; and (e) write an essay articulating, analyzing, interpreting, and reflecting on their fieldwork experiences.

To support a wide array of candidates through the program, Montclair added part-time employees and graduate assistants to offer evening appointments, workshops, and one-on-one meetings designed to help candidates prepare for the certification examinations. Mia Kirk, Alternative Route Teacher Education Program Supervisor, noted that Montclair began hiring part-time employees or graduate assistants due to the increased and unique needs of teaching candidates. She explained that the appointments previously catered to traditional undergraduate candidates, but they did not serve the needs of many candidates.

Table E1. Montclair Early Childhood/Special Education Masters Coursework

Core courses
• Perspectives on Early Childhood Education in a Diverse Society • Sociocultural Context of Disability and Inclusive Education • Early Learning and Development in Young Children With and Without Disabilities • Observation Assessment of Young Children With Disabilities: Birth to Age 8 • Strengthening Partnerships With Families of Children With Disabilities • Principles and Practices in Inclusive Early Childhood Education • Language and Early Literacy Development • Communication, Collaboration, and Consultation in Inclusive Early Childhood Contexts • Integrated Curriculum and Pedagogy in Inclusive Early Childhood Classrooms • Methods of Research • Literacy Foundations
Content/Methods
• Social Studies and the Arts: Understanding Democracy in Elementary Classrooms
Professional sequence
• Seminar I – Inclusive Early Childhood and Elementary Classrooms • Clinical Practice I – Inclusive Early Childhood and Elementary • Integrating Math/Science/Technology in Inclusive Early Childhood Classrooms • Seminar II – Inclusive Early Childhood and Elementary Classrooms • Clinical Practice II – Inclusive Early Childhood and Elementary Classrooms

Source: Montclair State University (n.d.). *University catalog: Teaching, with teacher certifications in preschool through grade 3 and students with disabilities (M.A.T)*. (accessed 11/11/2024).

Supervised Field Placement

The state of New Jersey requires a minimum of 2 semesters of supervised field placement for its P–3 teaching candidates, with at least 175 hours in the first semester of student teaching and full-time hours in the second semester for at least 12 weeks. The clinical placement must be in at least two different classroom settings, one of which must include students with disabilities. If possible, these placements are expected to occur at one school site for the entire duration of the clinical experience. In the Newark Montclair Urban Teacher Residency, residents complete their supervised clinical placement in the Newark school in which they are placed at the beginning of the program.

Across all P–3 programs, including this residency, Montclair requires an inquiry seminar to accompany the supervised clinical experience to engage candidates in collaborative reflection and learning using critical perspectives.

Clinical Supervision and Mentoring

Montclair residents receive regular feedback from their university supervisors and their mentor teachers. P–3 candidates are assigned supervisors who have early childhood classroom experience. Throughout the residency, university supervisors conduct six observations, with pre- and post-observation opportunities for feedback with candidates.[212] Mentor teachers are selected through a collaborative process between school administrators and university faculty. Mentor teachers' practice is observed by both administrators and faculty; potential mentors are also required to submit a letter of interest, analyze a video of someone teaching, and demonstrate how they might provide feedback and advice.[213] Once placed with a resident, mentor teachers submit their evaluations of candidates to Montclair.[214]

Across programs and pathways, Montclair allows mentor teachers access to collaborative professional development designed to build their own skills. Field supervisors work closely with mentor teachers and see part of their responsibility as modeling for mentor teachers how to help teacher candidates learn and grow. One supervisor shared:

> I want to model for [mentor teachers] the way I help student teachers to unpack their reflection on the lesson. I always start with asking them to restate what their goal was for the lesson. Instead of saying, "How do you think it went?" which I think is not a terribly helpful thing to ask, I say, "Well, how did you do at meeting your goal?"[215]

By modeling their own strategies for helping candidates, the supervisor builds the capacity of the mentor teacher to ask good reflective questions of their resident. Modeling support for candidates and shared professional development helps build cohesion across the coursework and field experiences and ensure that mentor teachers and field supervisors, who are also instructors, share the same goals.

To maintain strong university–district relationships, Montclair faculty work closely with district leaders and principals to facilitate learning opportunities for mentor teachers and teacher candidates. This multilevel support system of university, district, and school leaders is designed to maintain a cohesive experience for Montclair teacher candidates, with clinical experiences aligned with Montclair values and coursework. These close relationships also enable Montclair faculty to continuously improve their program to better fit the needs of the schools in Newark and other partner school districts, while simultaneously investing in and supporting the improvement of those same schools and classrooms.

Montclair Early Childhood Education Bachelor of Arts Program

The early childhood education bachelor of arts program is an undergraduate program designed for candidates who seek to obtain a bachelor's degree and P–3 teacher certification. Undergraduate candidates in early childhood education must declare a major in family science and human development and P–3 certification. When the P–3 credential was initially implemented in the state of New Jersey, candidates encountered difficulties transferring courses between community and 4-year colleges. To facilitate the transfer of general education credits, the state legislature required articulation agreements between all 2- and 4-year colleges. As a result, Montclair's Early Childhood Education P–3 preparation program draws a considerable number of transfer candidates from 2-year colleges.[216]

Design of Coursework and Clinical Experiences

Montclair reduced the maximum number of units required for completion of all bachelor's degree programs to 120 units, inclusive of major and teacher education coursework. Informants indicated that the university considered making an exception for teacher education programs, as candidates must both major in a liberal arts subject and specialize in teacher education, but ultimately the liberal studies and teacher preparation faculty were able to revise the coursework to require no more credits than other majors. Caroline Murray, Assistant Director of the Center of Pedagogy at Montclair, explained, "Our students technically can finish in 4 years. Sometimes they choose to take more time, but they can, in theory, finish in 4 years."[217]

Candidates engage in two phases of a coursework sequence: pre-professional and professional. The pre-professional coursework sequence takes place prior to admission into Montclair's Teacher Education Program and focuses on fundamental knowledge on teaching and learning. During the second, professional course sequence, courses focus on pedagogical content knowledge for different subject areas, equity and diversity, and clinical experience. In order to complete all coursework in 4 years, candidates need to begin their pre-professional coursework in their first year and apply to the P–3 credential teacher education program by their second year.

During the pre-professional phase, candidates consult with a Teacher Education Program Advisor to ensure that they understand and meet the requirements, and they must complete the 24 credits of prerequisites. Montclair outlines five specific courses that all candidates must take as prerequisites (see Table E2 for full coursework list), though one course, Historical Foundations of Education, can be waived if the candidate already possesses an associate of arts or science degree. Candidates can choose among courses offered in the Department of Family Science and Human Development to fulfill the remaining prerequisites for their major and prerequisites for the early childhood (P–3) teacher certification.

Once undergraduate candidates complete their prerequisites, they may work on the remaining 21 credits of courses in their pre-professional sequence, which can be completed before or while applying to the teacher education program. These additional pre-professional courses build on candidates' foundational child development, psychology, and education knowledge. Additionally, candidates must begin taking pedagogical coursework that covers math, arts, and literature within early childhood and elementary settings. For admission into the professional sequence, candidates must finish all their pre-professional coursework with a 3.0 or higher overall and major GPA.

Table E2. Montclair Undergraduate Early Childhood Education Certification Course Sequence

Pre-Professional Coursework
Prerequisites to apply to the Teacher Education Program (also fulfill Family Science and Human Development major requirements): • Fundamentals of Speech – Communication • General Psychology I • Child Development I • Perspectives on ECEL Education in a Democracy • Historical Foundations of Education[a] • Three additional courses (9 credits) in Family Science and Human Development
Pre-professional courses that can be taken before or while applying to the Teacher Education Program: • Child Development II • Psychology of Exceptional Children and Youth • Philosophical Orientation to Education[a] • Mathematics in the Elementary School Part I • Mathematics in the Elementary School Part II • Arts and Creative Expression in Early Childhood • Children's Literature for a Multicultural Society • Physiology & Hygiene: Approved course or Health Knowledge Test[b]
Professional Coursework
Courses taken after admission into the Teacher Education Program: • Foundations of Philosophy in Inclusive Education • Initial Inquiry Into Literacy Development • Integrating Curriculum and Pedagogy • Building Programs & Community in Inclusive Early Childhood Education
Courses taken during the clinical practice year: • Clinical Practice I – Inclusive Elementary Classrooms • Seminar I – Inclusive Elementary Classrooms • Problem-Solving in Science, Technology, and Math • Clinical Practice II – Inclusive Elementary Classrooms • Seminar II – Inclusive Elementary Classrooms

[a] Can be waived with an AA/AS degree.

[b] A Physiology and Hygiene approved course is required for the New Jersey teaching certificate. It can be completed through coursework or by passing the Health Knowledge Test.

Source: Montclair State University. (n.d.). *Early Childhood Education (Undergraduate P–3 single certification)*. (accessed 11/11/2024).

Once admitted into the Montclair Teacher Education Program, candidates may begin their professional coursework sequence and complete any remaining pre-professional courses. Prior to their clinical practice semesters, teacher candidates must complete 12 credits of coursework focused on inclusive education, literacy development, and curriculum and pedagogy (with a grade of B- or higher).

During the first clinical practice semester, candidates enroll in their supervised clinical placement along with a concurrent seminar on inclusive elementary classrooms and a course on problem-solving in science, technology, and math.

By the second clinical practice semester, candidates are expected to have completed all of their professional coursework, and they are not permitted to take additional courses outside of their clinical practice placement and seminar.

Supervised Clinical Placement

For the first supervised clinical practice semester (Clinical Practice I), candidates need to leave 2 days open in their schedule to complete the placement hours and are advised to take no more than three other concurrent courses. During the second and final supervised clinical practice semester, candidates complete their clinical internship (Clinical Practice II) and accompanying reflective inquiry seminar. Prior to the second semester, candidates must take the state-required Praxis Subject Assessment.

Conclusion

Montclair has successfully created an organizational structure, the Center of Pedagogy, that coordinates teacher preparation across entities and pathways. It has also articulated a coherent vision through the conceptual framework for teacher preparation in the Portrait of a Teacher. The Center can follow through on the coherent vision to work with faculty across departments and colleges to align coursework, increase capacity for supervised clinical experience that promotes the program's vision of what teachers should know and be able to do, and offer supports to candidates to manage certification requirements across programs.

Additionally, Montclair has developed strong connections with partner schools that serve as good models of practice for candidates and has, in part, enabled strong outcomes of its Newark Montclair Urban Teacher Residency Program.

Appendix F: Louisiana Tech University's Early Childhood Education PreK–3 Bachelor of Science Program Profile

Institutional Overview

Located in Ruston, the largest city in North Central Louisiana, Louisiana Tech University (LA Tech) is a comprehensive public university that offers undergraduate, master's, and doctorate degrees.

The undergraduate and the Master of Arts in Teaching (MAT) programs in early childhood are both housed in the College of Education and Human Sciences in the same department that houses the elementary and secondary teacher certification programs. As part of a technology-oriented institution, STEM plays an important role, even in the College of Education and Human Sciences. Dustin Hebert, former Chair of the Department of Curriculum, Instruction, and Leadership at LA Tech, said:

> We are primarily an engineering school, there is no secret about that…but we do not feel out of place, we are not treated differently; in fact, it works in our favor in many respects….Because we're an engineering institution, we very much do emphasize STEM education, and so we have a STEM education institute as part of the College of Education.[218]

Importantly, in tune with its history, LA Tech assumes a special responsibility to integrate STEM and advanced technology into teaching and learning. At LA Tech, advanced technology supports quality teaching, research, administration, and service. The university is committed to providing its candidates, including prospective early childhood educators, with advanced technological skills to support their professional success.

LA Tech offers two programs leading to a PreK–3 credential: Early Childhood Education PreK–3 (BS), which includes a dual enrollment pathway for high school students, and Early Childhood Education PreK–3 (MAT). Here, we focus on the bachelor of science program.

The PreK–3 credential programs are popular among education candidates. From 2018 to 2020, the Bachelor of Science program in Education graduated 48 candidates, 22% of all 328 LA Tech teacher education graduates. An estimated 95% of LA Tech's PreK–3 BS candidates successfully complete the program. Between 2018 and 2020, LA Tech had 328 completers across all teacher preparation programs, of which 90% were White, 6% Black/African American, 2% two or more races, 1% Asian, and 1% American Indian or Alaska Native.[219]

Recruitment and Admissions

LA Tech's 4-year baccalaureate program in education is primarily designed for candidates matriculating directly from high school who want to obtain initial (Level 1) licensure. Its undergraduate admission requirements are comparable to its peer institutions in the state, requiring a combination of high school coursework, high school GPA, and college admissions test scores. However, LA Tech has a policy to admit candidates not meeting all requirements depending on "the student's potential for degree completion and the need to enhance the university's demographically diverse student population. Some factors to be

considered may include age, experience, ethnic background, and creative talent."[220] High school seniors who participate in the dual enrollment program are not required to submit a separate application for university admission.

Despite its flexible admissions criteria, LA Tech has reported challenges with recruiting candidates from racially and geographically diverse backgrounds. The program specifically recruits candidates who want to teach in the rural, lower socioeconomic communities that surround LA Tech. However, this focus has been a challenge. It is difficult for districts in very rural areas with high poverty rates to staff schools because they are often not desirable or commutable for young professionals who typically want access to resources, dining, and entertainment and leisure activities.

Another recruitment challenge is LA Tech's competition with Louisiana's 25 other institutions that offer teacher education degree programs. One way LA Tech attempts to distinguish its programs among so many competitors and attract a more diverse pool of candidates is through scholarships. While the state does not provide any sort of recruitment incentives specifically for the undergraduate early childhood credential program, LA Tech is fortunate to have generous donors, which enables the College of Education and Human Sciences to award approximately 25 scholarships annually that total around $70,000, according to Hebert.[221]

To increase racial representation within its PreK–3 program and to recruit candidates who would want to return to teach in rural communities, LA Tech started a dual enrollment program in 2021–22. Recruitment for the dual enrollment program targets high school juniors and seniors in rural communities who are interested in attending LA Tech after high school graduation. In this pilot, a small cohort of high school students took three online college-level introductory early childhood education courses.[222] Of the seven 4-year bachelor's-granting institutions studied, only LA Tech offered a dual enrollment program as an early on-ramp into teaching preparation.

Requirements to participate in dual enrollment courses include on-track 11th or 12th grade academic standing for completing the Louisiana Core 4 Curriculum for high school, a minimum composite score of 19 on the ACT or Pre-ACT, and a GPA of at least 2.5.

The dual enrollment program at LA Tech is still in its infancy, with just one cohort of nine students at a high school in rural northwest Louisiana. There are no instructors on staff at the high school with the qualifications to teach dual enrollment courses. The program, therefore, is virtual, offering 9 hours of education courses that are also required of ECE undergraduate majors:

- Introduction to Teaching: an introduction to teaching and learning in PK–12 settings facilitated through classroom discussions, selected readings, and field-based projects in schools
- Learning and Development: an in-depth study of human development with emphasis on contemporary research relating to human learning and the application of psychological principles
- Instructional Technology: a course designed to introduce instructional technology for teaching and learning

Hebert described the potential for dual enrollment candidates to get a head start in college after graduating high school:

> These kids will all graduate with 9 hours, not just of college credit, but of college credit in education. If they also took AP credit exams or other dual enrollment courses and they plan it right, they could actually start as sophomores and shave off that freshman year because they basically double dip their senior year of high school and their freshman year of college. What we discovered was that this was low-hanging fruit. [Offering online dual enrollment courses] was something we could do without the need for any more resources and without all that many logistical complexities.[223]

Early Childhood Education PreK–3 Bachelor of Science Program

Faculty and Advising

Program faculty are nearly all tenured or tenure track. The Early Childhood Program has one adjunct whose specialty area is early childhood special education because there were no faculty on campus who could bring that expertise.

Only two of the professional education course requirements, the "research-based" development courses, are taught outside of the College of Education and Human Sciences. When the state updated requirements to include four additional early childhood development courses for the PreK–3 credential, LA Tech collaborated with faculty from the School of Human Ecology to teach two of the newly required courses. This cross-department collaboration took advantage of extant qualified faculty rather than using scarce resources to hire new faculty. The two new courses that are more curriculum- and pedagogy-focused are taught by a teacher education faculty member.

Academic advising for the Early Childhood PreK–3 BS Program is an important program component and begins before potential candidates start their first year. In the past, the department chair held a group orientation and advising session. When Hebert took over as chair, he felt that this approach was too impersonal. As he said, "I get these enrollment reports. … There are 50 names on there. I have no idea who these people are." Hebert switched to a one-on-one advising model in which faculty meet with every program admit at scheduled orientation sessions over the summer. This outreach is possible because LA Tech assigns candidates to their respective academic departments when they are freshmen, rather than in their sophomore years, as is common in many higher education institutions. The faculty member with whom each student meets is that student's academic advisor for the entire time they are in the program. Hebert shared that this new structure allows candidates "to build a rapport with the person who will advise them for 4 years right away before they ever start classes" and "they already know at least one faculty member with whom they have a connection." After the college implemented this change, Hebert said, "I don't get the same types of questions [in the office]. Students are more comfortable now going to their advisors."

In addition, the college has changed its advising approach to provide reminders and check in on a regular basis with candidates before issues arise. Hebert shared, "We've also restructured how we handle advising so we're being more proactive than reactive. It's all been to try to ensure that the student experience is what we want it to be and that it begins as soon as they arrive on campus."

Design of Coursework and Clinical Experiences

LA Tech's PreK–3 BS program is a 126-credit hour degree. It has three major components that, together, cover the state requirements, in addition to electives: core (47 general education semester hours), professional education (58 early childhood education semester hours), and practicum (21 pedagogy semester hours).

Coursework. LA Tech purposefully integrates core academic and professional education requirements during the first 2 years of the undergraduate program. Year 3 is nearly all professional education courses, with the fourth year as the full-year, full-time "residency" (non-teacher of record). See Table F1 for a list of courses by year. In order to facilitate education candidates to complete the required coursework in 3 years, they have little to no opportunity to take additional elective courses outside of the core and professional major education courses.

Table F1. LA Tech PreK–3 Baccalaureate Program of Study by Year

Year	Core course topics (credit hours)	Professional major courses and practicum (credit hours)
1	English (9) Mathematics/statistics (8) Biology (6) U.S. history (3) Communication (3)	First-Year Experience (1)[a] Introduction to Teaching (3)[b] Learning and Development (3)[b] Instructional Technology (3)[b]
2	English (3) Mathematics (6) Geography (3) Political science (3) Physics (3)	Comprehension: Developing Understanding (3) Practica in Education (6) Early Childhood Mathematics Methods (3) Early Childhood/Elementary Science Methods (3) Human Exceptionalities (3)
3		Diagnosis and Correction of Reading Difficulties (1) Practica in Education (6) Early Childhood/Elementary Writing Methods (3) Early Childhood/Elementary Reading Methods (3) Early Childhood/Elementary Social Studies Methods (3) Early Childhood/Elementary Graphophonics Methods (3) Early Childhood Curriculum (3) Early Childhood Learning Environments (3) Child Psychology (3) OR Early Childhood Development (3)

Year	Core course topics (credit hours)	Professional major courses and practicum (credit hours)
4		Clinical Residency (9) Diverse Learners (3) Instructional Design, Strategies, and Assessment (3) Strategies and Procedures for Serving Young Children With Special Needs (3) Behavior and Classroom Management (3) OR Classroom Management (3) Fine Arts Elective (3)

[a] Not counted toward total course hours

[b] Dual enrollment courses

Source: Louisiana Tech University. *Early childhood education—grades PK–3 (BS)*. (accessed 05/24/2022).

Integrated Field-Based Experiences. Louisiana state requires field-based practicum hours before the supervised clinical placement "residency year," but the state does not specify the number of hours. LA Tech carefully sequences and structures field-based experiences in Years 1 through 3 to support candidates' pedagogical development through multiple opportunities in real classrooms. These field-based experiences are tightly linked to courses and assignments.

Program leadership explained that they want candidates to make sure that teaching is really the career path they want to follow as early as possible. The introductory freshman education courses, accordingly, include structured field-based experiences in classrooms with some scaffolding and guidance. Specifically, for each content area, candidates develop pedagogical content knowledge in the first-quarter classes. In the second quarter, they apply that knowledge in classroom field placements, taking on increasing responsibilities, such as creating and delivering lessons. Content faculty observe candidates in their supervised clinical placements and provide feedback on the application of the pedagogical practices learned in their coursework.

Faculty members are consistent between the methods course and associated practicum. This structure ensures consistency between the pedagogical strategies that candidates learn through their coursework and expectations for application in fieldwork. This structure also supports continuity in developing the candidates' pedagogy over time: Working with the same candidates across more than one quarter enables the instructors to provide individualized scaffolding based on a deeper understanding of each candidate's development.

LA Tech also takes advantage of having an early childhood laboratory school (lab school) on campus. Sometimes faculty take candidates to the lab school to demonstrate or observe a strategy. Sometimes they will have candidates rotate through the different lab school classes and participate in the interactive activities happening with the children.

Although faculty leverage the lab school for those early courses, they also try to give candidates exposure to the breadth of education in other settings and grade levels, not just early childhood, before candidates finalize their specialization. For example, someone who has expressed interest in being a kindergarten teacher will also have a chance to observe in a high school classroom and vice versa. LA Tech ensures diversity of fieldwork experiences by tracking all placement data and assigning specific schools for specific content area practica so that there is no duplication.

Supervised Clinical Placement

LA Tech's supervised clinical experience is concurrent with the last five courses of the program. LA Tech partners with 12 districts for supervised field placements. The memoranda of understanding with the partner districts clearly lay out roles, responsibilities, and requirements of the residents, the mentor, the school leader, the district, and LA Tech faculty. Candidates can choose among the 12 partner districts, and many candidates select a district where they would like to teach or one that is closer to their home (also reducing housing costs to the student). Allowing this choice of placement district works better for the candidates and supports the hiring districts.

Clinical Supervision and Mentoring

The clinical experience is enhanced by well-trained mentor teachers. Louisiana requires rigorous training and evaluation for supervisory teachers to be certified as a mentor. In return, the state covers the cost of training and provides a stipend for serving as a mentor to undergraduate residents.

The state developed a process for training mentor teachers and outsources the training to approved vendors. LA Tech is an approved provider. Its mentor program is structured as 6 hours of graduate course credit, which the university uses as a recruitment tool for its master's programs. Despite the rigorous requirements, LA Tech's mentor program is in high demand, which may be attributed to the relationships LA Tech has built with districts over time. From 2020 to 2022, LA Tech had 60 to 70 mentor teachers in its program each summer, with some districts sending entire cohorts of teachers. According to Hebert, coordination is key to the success of the mentor program:

> We have a couple of staff people who coordinate all this and one of them is our mentor coordinator. One of our staff has regular mentor seminars, where the mentor teachers, at the end of the school day or in the evening, form some professional learning communities among the mentors.[224]

Upon successful completion of the training from a state-approved vendor, prospective mentor teachers must pass a performance assessment that entails collecting and analyzing artifacts of actual mentoring with a mentee under the supervision of a certified mentor teacher. The assessment takes 2 to 3 months to complete.

State policy requires that the district identify the mentors, and the district pays the mentor using state funds provided for that purpose. The state requires districts to communicate with the program before the state releases funds. This requirement supports communication between the teacher preparation program and the district and increases opportunities for collaboration among IHEs, districts, and schools.

LA Tech staff have "check-ins" every 2 to 3 weeks with mentors to foster a positive, proactive relationship. As Hebert shared, "[We] try be proactive, so that we keep a relationship with them and don't only have them call us when something's wrong."[225]

Assessment

Louisiana does not require a teaching performance assessment for initial or complete professional certification. Candidates must instead pass two content and pedagogy Praxis tests: the Praxis Elementary Education Exam: Multiple Subject (reading and language arts, math, social studies, science) and the Praxis Principles of Learning and Teaching Exam: Early Childhood.

Conclusion

LA Tech illustrates how to design an early childhood education preparation program that integrates field experience into coursework. It also offers an example of an early childhood teacher preparation program that can be completed in 4 years while still incorporating a full year of supervised field experience. The trade-off of such a program design, however, is the loss of flexibility in course requirements. Candidates are not able to pursue courses beyond their major and credential requirements. As such, academic advising and supports are crucial to ensure that candidates enter the program in their first year of undergraduate coursework and that the early childhood education preparation program is the right fit for them.

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17. Information about teaching credentials and licensure requirements are drawn from state licensure standards and regulation documents.

18. All states and the District of Columbia have an early childhood license, credential, or endorsement for early childhood educators, but five states do not have a stand-alone credential (see Appendix A). Of those, three have optional early childhood endorsements that can be added onto an existing teaching license and one (Utah) does not have an early childhood concentration that extends earlier than kindergarten.

19. For the 26 states with stand-alone early childhood credentials but no credential requirement, 6 have no state public preschool program, and the rest offer a range of qualifications for public preschool teachers to meet, such as a Child Development Associate (CDA) credential, an associate or bachelor's degree in early childhood education, a certain number of credits in early childhood coursework, or successful completion of early childhood licensure exams.

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