

Recruitment and Retention of Early Intervention (EI) and Early Childhood Special Education (ECSE) Personnel:

A Synthesis of Innovative Practices

https://ectacenter.org/topics/personnel/recruitment-new.asp

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| Introduction | 2 |
|---|----------------|
| EI/ECSE Personnel Recruitment and Retention Strategies | 7 |
| Compensation, Loan Forgiveness, and other Financial Incentives | 7 |
| Table 1. Compensation, Loan Forgiveness, and other Financial Incentives: State and Local Examples | 10 |
| Grow Your Own Programs | 2 [^] |
| Table 2. Grow Your Own Programs: State and Local Examples | 23 |
| Public Awareness about Career Opportunities | 33 |
| Table 3. Public Awareness about Career Opportunities: State and Local Examples | 35 |
| Ongoing Professional Learning and Practice-Based Opportunities | 40 |
| Table 4. Professional Development and Practice-Based Opportunities | 42 |
| Supportive Workplace Environment Strategies | 50 |
| Table 5. Supportive Workplace Environment Strategies | 53 |
| Leadership and Advancement Opportunities | 6′ |
| Table 6. State and Local Examples of Leadership and Advancement Strategies | 63 |
| References | 67 |

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Introduction

Shortages of personnel serving children with disabilities are not a new phenomenon but have reached a crisis impacting early learning settings across the United States. The United States Department of Education (2021) reported that district and local administrators are facing staffing shortages that disproportionately impact students of color, students from low-income backgrounds, students with disabilities, and often entire communities. Schools and districts face unprecedented challenges in hiring educators of young children with and without disabilities. Enrollment in teacher preparation programs is decreasing, with some reports suggesting enrollment was down as much as twenty-five percent since 2010 (Kaniuka, 2020). The profession of occupational therapy is also seeing decreased applications and enrollments in occupational therapist and occupational therapy assistant education programs (AOTA, 2023). Simultaneously, attrition, or educator turnover, is increasing (Kaniuka, 2020; Grant, 2017; Sutcher, Darling-Hammond, & Carver-Thomas et al. et al. et al., 2016; Goldhaber, Strunk, Brown, Chambers, Naito, & Wolff, 2018). These shortages in personnel also affect the early learning settings like child care, Head Start, and Prekindergarten programs that serve as natural environments and the least restrictive environments in which children with disabilities receive Part C, early intervention and Part B, Section 619 early childhood special education services.

The issues facing administrators, teachers, children, families, and communities are similar regardless of where the EI/ECSE services are delivered. Research suggests that staffing challenges, endemic to early intervention, special education and early childhood education, are related to recruiting as well as retaining practitioners. The Administration for Children and Families (United States Department of Health and Human Services, 2021) noted that early childhood education programs across the United States face unprecedented personnel shortages that risk national economic recovery. This churn has disproportionate negative impacts on schools and programs, communities, and eventual outcomes for young children with and without disabilities.

This Recruitment and Retention of Early Intervention / Early Childhood Special Education Personnel: A Synthesis of Innovative Practices (the Synthesis) provides information for, and resources to support state, local program, and school administrators as they address the shortage of early intervention and early childhood special education personnel (EI/ECSE personnel). When used in the synthesis, EI/ECSE personnel refers to early interventionists, early childhood special educators, or related service providers. These personnel include special educators; speech-language pathologists and audiologists; occupational therapy practitioners; physical therapists; psychologists; social workers; nurses; registered dietitians; family therapists; vision specialists, including ophthalmologists and optometrists; orientation and mobility specialists; service coordinators; pediatricians and other physicians. We recognize that children with Individualized Family Service Plans (IFSPs) or Individualized Education Programs (IEPs) receive services in a variety of settings that are supported by the broader early childhood education (ECE) workforce including staff who work with children in child care programs, Head Start programs, state and local pre-K programs, private preschools and family child care programs. Throughout the synthesis we reference research and provide resources and strategies that address shortages of EI/ECSE personnel and the broader ECE workforce.

We address both the EI/ECSE personnel and the broader ECE workforce because a truly inclusive approach to supporting and educating young children with disabilities means that children can receive services in the *natural environment* and in a *least restrictive environment* among their peers. This inclusive model requires the support of multiple roles within the profession. In an inclusive setting, early childhood teachers and caregivers support the strategies that therapists and other related service providers include in a child's IFSP or IEP. They also provide critical information about a child's progress as well as where they need additional support. These ECE professionals are part of the intervention

plan and support the delivery of El/ECSE interventions in their classrooms, preschools, and family childcare homes.

The Synthesis is organized around key strategies aligned with The Office of Special Education Program's (OSEP) Attract, Prepare, Retain: Effective Personnel for All Initiative. Wherever possible, these strategies have been curated from research literature and states and programs focused on EI and ECSE. It is important to note, however, that we found scant research that focused specifically on recruiting and retaining EI/ECSE personnel. To some extent this was also true in our search for state and local innovations. More commonly, we found that research and strategies are specific to one part of the system (e.g., school-based (K-12) special education teachers or paraprofessionals or general ECE programs) or EI/ECSE personnel with a discipline-specific focus (e.g., speech-language pathologists, occupational therapists, etc.). Thus, to create a robust synthesis, we relied upon both research and state/local examples that have the potential to inform and support both the EI/ECSE and broader ECE professions.

Given our findings that the research literature and innovations specifically focused on EI/ECSE are limited, we have noted which EI/ECSE role(s) may benefit from the highlighted state or local innovation while also challenging users of the Synthesis to see where and how it might be possible to apply the same strategy to other roles specific to the EI/ECSE system of inclusive services. More specific terminology (e.g., special education teachers or speech-language pathologists) is used when citing research data that use a particular term or title.

These strategies in the Synthesis are compiled using the following key areas:

- Compensation, Loan Forgiveness, and other Financial Incentives (Attract)
- Grow Your Own Programs (Attract)
- Public Awareness about Career Opportunities (Attract)
- Ongoing Professional Learning and Practice-Based Opportunities (Prepare, Retain)
- Leadership and Advancement Opportunities (*Retain*)
- Supportive Workplace Environment Strategies (*Retain*)

The Synthesis provides highlights from the research literature related to these strategies and then outlines how states and local programs have enacted policies and processes in support of them.

Recommendations for Use

The Synthesis aims to raise awareness about state and local strategies, provide ideas for states to consider when implementing new initiatives, and serve as a resource for technical assistance (TA) supports. The Synthesis is intended for use by:

- IDEA Part C and Part B Section 619 state coordinators and staff
- Providers of services to children, birth to five years old with developmental disabilities, and their families
- Families of children, birth to five years old with developmental disabilities and delays
- Institutions of higher education and other personnel preparation entities and,
- Other organizations that support effective EI/ECSE recruitment and retention efforts such as TA providers.

The Synthesis can help users consider strategies used by other states/entities as possibilities for replication. Users can also identify areas for growth and possibilities for solving recruitment and retention challenges. The Synthesis will continue to evolve through a series of focus groups scheduled to take place from fall 2023 through spring 2024.

If there are unfamiliar terms in the Synthesis, please consult the glossaries available on the ECTA website. Here you will find an Indicators of High-Quality Inclusion Glossary and a glossary related to the ECTA Center's Indicators of High-Quality Inclusion Glossary and a glossary related to the ECTA Center's Indicators of High-Quality Inclusion Glossary and a glossary related to the ECTA Center's Intervention Programs. Many of the key terms from the Synthesis are clarified in these glossary resources.

The Technical Workgroup

This Synthesis was developed by researchers, state and program practitioners, advocates, families, and national EI/ECSE leaders who share a commitment to ensuring a diverse and effective EI/ECSE workforce. Working through the spring and summer of 2023, this group of individuals who made up the Technical Work Group for the project brought their lived experiences, wisdom, and passion to the development of the Synthesis. Meeting monthly to share their insight, help curate state and local examples, and interrogate retention and recruitment challenges to identify root causes and promising solutions, this group was key to ensuring a robust, relevant, and useful tool for state and program leaders nationwide. The TWG members, alongside the unique perspectives and positionality they brought to this endeavor are included here to highlight their commitment and contributions to this project.

| Name | Organization | Perspective |
|--------------------|--|---|
| Jessica Alex Bowen | Parent Representative, IDEA Infant Toddler Coordinators Association (ITCA) | Family Leaders interested in giving input on their lived experience in Early Intervention and Early Childhood Special Education (EI/ECSE) |
| Xigrid Soto-Boykin | Children's Equity Project | Diverse perspectives, including representatives from tribal communities or organizations |
| Kevin Byrd | ITCA | |
| Susan Cahill | American Occupational Therapy Association (AOTA) | Director of Evidence-Based Practice at AOTA, previously with higher education |
| Shannon Dunston | State 619 Coordinator | Chair of NASDSE 619 affinity group, works with higher education in Idaho |
| Julia Martin Eile | Office of Special Education Programs (OSEP) | OSEP project officer for Early Childhood Technical Assistance Center since 2008, work at the federal level since 2001, former Part C monitor |

| Name | Organization | Perspective |
|-----------------------|--|--|
| David Emenheiser | OSEP | OSEP Research to Practice division for 13 years; project officer for the Early Childhood Intervention Personnel Development Equity Center, other school projects, and parent centers |
| David Emenheiser | OSEP | OSEP Research to Practice division for 13 years; project officer for the Early Childhood Intervention Personnel Development Equity Center, other school projects, and parent centers |
| Margaret Gillis | The Center for IDEA Early Childhood Data Systems (DaSy) | Personnel data technical assistance lead, EI/ECSE workforce researcher, former professor of EI/ECSE |
| Darla Gundler | Early Childhood Intervention Personnel Center for Equity (ECIPC-Equity) | ECIPC-Equity, professional development systems, family leader, former Part C State Staff. |
| Christy Kavulic | OSEP | OSEP leader for 17 years, former Speech-Language Pathologist (SLP), oversees the early childhood team in the Research to Practice division, personnel preparation grants |
| Peggy Kemp | Division for Early Childhood (DEC) | DEC Executive Director, support for DEC members |
| Toby Long | American Physical Therapists Association (APTA) | APTA American Physical Therapists Association (APTA) representative as a physical therapist, also project director at Georgetown on personnel preparation grants |
| Lori Ann Malina-Lovel | ITCA | Part C Coordinator in Nevada, ITCA |
| Catherine Matthews | Educator | Special Education PreK Teacher and parent, Teacher of the Year for Montana, 2023 |
| Alondra Mustafa | Parent Representative State Interagency Coordinating Council (SICC) Parent Advocate Workgroup (PAW) Member, CSPD | Parent, SICC leader and Comprehensive System of Personnel Development (CSPD) advocate, former special education teacher, Latino identity. |
| Lisa Opert | Parent Representative SICC PAW Member, CSPD | Parent, SICC leader, equity focus, former teacher |

| Name | Organization | Perspective |
|--------------------------|---|---|
| Chioma Oruh | Early Childhood Intervention Personnel Center for Equity (ECIPC-Equity) | ECIPC-Equity, mother, academic, political scientist, community leader, teacher, community education, interest in multiple pathways |
| Micker Richardson | American Indian and Alaska Native (AIAN) Head Start Collaboration Officer | Diverse perspectives, including representatives from tribal communities/organizations - AIAN Head Start Collaboration, lead on mental health and disability services for AIAN |
| Mallory Warner | National Early Childhood Education Workforce Center | Research experience in recruitment and retention practices |
| Julia Wayne | Vermont Children's Integrated Services (CIS) | University of Vermont Center on Community Inclusion, oversees workforce, professional development and recruitment and retention survey data, oversees early intervention certification for Vermont, small rural state perspective, mother |
| Doanne Ward- Williams | American Speech-language - Hearing Association (ASHA) | Director of State Affairs for ASHA, state legislation/regulations for SLP, bilingual SLP previously in private practice |

El/ECSE Personnel Recruitment and Retention Strategies

This section of the Synthesis provides a summary of both research and strategies to support recruitment and retention efforts. The Synthesis also highlights efforts that focus on diversifying the EI/ECSE profession. Each of the six attract, prepare, and retain strategy areas include information gathered through research review, previously published resources on the strategy area, state websites, and personal communication with members of the technical workgroup. Because of the limited research literature focused specifically on the EI/ECSE profession, the cited research in this section comes from the study of factors that influence recruitment and retention more generally and before the Covid-19 pandemic. These studies focus on EI/ECSE adjacent personnel (e.g., child care providers, Head Start, or public PreK teachers), K-12 education generalists, and other related professions that can inform EI/ECSE recruitment and retention efforts. It should be noted that as researchers continue to study the effects of the pandemic on the EI/ECSE workforce, these findings will offer new information to inform effective recruitment and retention strategies. To that end, the Synthesis is intended to be a living resource that evolves as new research and strategies emerge.

Compensation, Loan Forgiveness, and other Financial Incentives

El/ECSE personnel compensation is an ongoing issue that impacts attraction and retention. Although motivation to serve in roles that support the growth and development of children with disabilities is related to altruism and love of facilitating learning, compensation impacts attracting and retaining this workforce. For EI/ECSE personnel, compensation and low societal valuation impact the number of individuals entering the profession (Wiggan et al., 2021; ASHA, 2023). For example, compensation is the largest perceived gap between early childhood special educators and college students' preferred career path (Sherratt, Duncombe, Maxey, & Moseman, 2022). For college students of color, the gap between eventual earnings and the student debt acquired while studying to meet qualification for teaching or providing disability services is a significant factor impacting their choice of a special education career (Dixon, Griffin, & Teoh, 2019; Ford, Smith, & Banister, G., 2021). For El personnel, the IDEA Infant and Toddler Coordinators Association (ITCA) found through their 2022 Tipping Points Survey that 100% of the forty-five states completing the survey reported experiencing shortages in El personnel in their states and 25% states reported having EI contracted personnel decline to participate due to fiscal constraints over the previous three years. According to the AOTA Compensation survey (2023), occupational therapy practitioners working in early intervention have an average base salary of \$57,885. The American Speech-Language-Hearing Association (ASHA) (2022) reports median pay for a speech-language pathologist working full-time in a pre-K school was \$68,000, which is 10% less than if they worked in a secondary school setting and 24% less than if they worked in a hospital or clinic setting. Speech-language pathologists also represent the profession that has the highest percentage of states (87%) reporting shortages for EI services.

For early childhood educators serving in child care, a critical portion of the EI/ECSE workforce supporting placement for children with disabilities in the least restrictive environment alongside typically developing peers, compensation is dire. The United States Bureau of Labor Statistics (2022) reports median pay as \$13.22/hour. The Center for the Study of Child Employment found that teachers of young children earn less, on average, than their colleagues in public schools (In North Carolina, for example, the median pay of child care workers in 2019 was \$10.62 an hour, compared to preschool

teachers (\$12.83 per hour) or public school teachers (\$27.89 per hour) (McLean, Austin, Whitebook, & Olson, 2021). Differences in compensation of early childhood education providers is also disproportionate by race, with Black women serving infants and toddlers making \$0.77 per hour less than their White peers, and Black women serving preschool-aged children making \$1.71 less than their White counterparts (Lloyd, Carlson, Barnett, Shaw, & Logan, 2021).

To address the financial burden that EI/ECSE personnel face, states have implemented strategies such as loan forgiveness, and other financial incentives to attract and retain EI/ECSE personnel. Providing financial support such as funding and loan forgiveness is one of the most effective strategies for attracting and retaining early childhood educators and early childhood special educators (Kucskar, Buchter, Oh-Young, & Weglarz-Ward, 2017).

Loan forgiveness includes tuition assistance and loan forgiveness programs to attract prospective teachers into high-need subject areas including ECSE, or to attract other EI/ECSE personnel, such as speech-language pathologists, physical or occupational therapists, and other specialized service providers where they have a shortage. (Acosta & Holdheide, 2021; ASHA, 2023). Loan forgiveness is a critical strategy for recruiting and retaining related service providers, clinicians, therapists, and therapy assistants (e.g., occupational therapy assistants), many of whom need to complete a master's degree or an entry-level doctorate to sit for their licensure exam.

The use of **financial incentives** allows local programs to attract and retain a qualified workforce and complements a competitive compensation and benefits package. Incentives allow service providers to make a reasonable living and make remaining in the field affordable. Incentives include mortgage guarantees or other housing support, down payment assistance in exchange for service commitment agreements, decreased employee tuition in fee-for- service funded placements in public school prekindergarten programs and wrap-around care, and opportunities to continue teaching, mentoring, and coaching after retirement (Sutcher et al., 2016). Providing professional memberships and licensing fees may be valuable incentives. Barth et al. (2016) caution, however, that incentives must be used to complement competitive wages and working conditions, and that incentives are not a replacement for ongoing support in schools with positive working conditions.

Spotlight on Increasing El/ECSE Workforce Diversity

Loan forgiveness is a key strategy for attracting EI/ECSE personnel of color. According to Carver-Thomas (2018), when loan forgiveness programs are available, districts see 25 percent increases in teachers of color. Loan forgiveness and financial support strategies are effective especially in early childhood education and early childhood special education because educators can begin at the associate degree level. Not only have these strategies been attractive in retaining educators, but they also increase workforce diversity due to their attractiveness to individuals in historically marginalized communities (Bettini et al.,2019; Carver-Thomas, 2018; Eberly, 2018).

State and Program Use of Supplemental Pandemic Funding

Compensation is an ongoing issue impacting attracting and retaining early interventionists, early childhood special educators, and related service providers. Many states and programs used supplemental pandemic funding to address low compensation to retain staff and to be able to continue providing services. Examples include:

Rate increases for El personnel

ITCA reports through their 2022 Tipping Points Survey that eighteen states indicated they had increased EI provider reimbursement rates over the last three years and five states indicated they will increase reimbursement rates over the next twelve months. **Retention bonuses** and **salary enhancements** in: Alabama, Alaska, Atlanta, Georgia, Colorado, District of Columbia, Illinois, Kentucky, Maine, New Mexico, North Carolina, Virginia. In addition, an early childhood program in Connecticut offers a **hiring referral bonus** for educators who refer a successful hire. Using their Preschool Development Birth to Five Grant (PDG B-5), Texas offers hiring and retention bonuses to Early Childhood Intervention (ECI) therapists, with a preference for those working in rural counties. The state also offers stipends for ECI providers who mentor interns or new staff.

Some states and larger cities leveraged the pandemic to demonstrate the need for sustained increases in compensation to pass legislation enacting permanent, statewide salary and wage minimums and pay scales. The states/cities identified include Atlanta, Georgia, the District of Columbia, and Hawaii.

Other Financial Incentives

Other Financial Incentives allow early interventionists, early childhood special educators, and related service providers to make a reasonable living and make remaining in the field affordable. Incentives include mortgage guarantees or other housing support, down payment assistance in exchange for service commitment agreements, decreased employee tuition in fee-for- service funded placements in public school prekindergarten programs and wrap-around care, and opportunities to continue teaching, mentoring, and coaching after retirement (Sutcher et al., 2016). Examples identified that relate to these types of incentives include providing **employee housing** or **financial assistance for housing** in Montana and Connecticut and offering access to **free or subsidized health care and/or child care** in Kansas, Kentucky, and Washington.

Additional details about *Compensation, Loan Forgiveness, and other Financial Incentives* are included in **Table 1**.

Table 1. Compensation, Loan Forgiveness, and other Financial Incentives: State and Local Examples

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------------|-----------------------|--------------|------------------------------------|
| AL | "Child Care Workforce Stabilization Grant bonus payments of \$3000 quarterly to support recruitment and retention issues. To qualify for the bonus, each employee must be working a minimum of 16+ hours each week, must be hired on or before 30 days prior to the beginning date of the qualifying period, and must be employed until the end of the qualifying period. It can be used to SUPPLEMENT, NOT SUPPLANT (replace) existing funding streams." Source: Alabama Department of Human Resources, Child Care Services Division | Yes | | ECE Providers | | Short Term |
| AK | "The 2022 Alaska SEED ROOTs Award is one award amount for everyone at \$3,000 per person, regardless of what level you are on the Alaska SEED Career Ladder. The award recognizes previous and continued employment in the early childhood education field. Must be in Alaska's EC Registry" Sources: US HHS, ACF, ECD, Examples of State and Local Early Childhood Workforce Strategies | Yes | | ECE Providers | | Short Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|---|----------------------------|-----------------------------|--|--------------|------------------------------|
| AZ | First Things First Early Childhood Therapist Incentives Program "The FTF College Scholarship provides the early childhood workforce working directly with or on behalf of young children birth through age five access to education and training to achieve degrees, credentials, and specialized skills to promote children's development." Source: Featured Scholarship: "Honor the Past and Reimagine the Future" | No | State and Federal | SLPs, OTs, PTs, Clinical Psychologist, Mental Health Specialists | | Long Term |
| СО | The Educator Recruitment and Retention (ERR) Program "This program was created to provide qualified program applicants with up to \$10,000 in one-time financial assistance toward their educator preparation program costs. Recipients must commit to teaching in a shortage area for three years in a Colorado public school in core teaching subject areas, statewide shortages were greatest in the following areas (listed in descending order): special education, early childhood education, mathematics, science, and world languages." Source: Educator Recruitment and Retention Program, Colorado Department of Education | No | | Prek-12 Teachers | | Long Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|---|----------------------------|-----------------------------|---|---|------------------------------|
| СТ | Teachers Mortgage Assistance Program "CT Housing Finance Authority offers an additional 0.125% off already below-market interest rate loans to help Teachers become homeowners in the communities where they work. CHFA will increase the rate reduction to 0.25% to help Recruit and Retain minority Teachers who meet the eligibility criteria." Eligibility includes teaching in a shortage area and special education preK-12 is a shortage area Source: CT Housing Finance Authority | No | State | Pre-K-12 special educators, Pre- K-12, bilingual educators, SLPs, school psychologists | Increased rate reduction for Prek- 12 Teachers of color | Long Term |
| СТ | "Teachers at Children's Learning Centers of Fairfield County (CLC), a Head Start grant recipient in Fairfield, can recommend individuals with an interest or background in early childhood education to work at CLC, and if that person is hired and stays with CLC for at least six months, the recommending teacher receives a \$500 employee referral bonus, with no limit to the number of referral bonuses one can receive." Source: US HHS, ACF, ECD, Examples of State and Local Early Childhood Workforce Strategies | No | | ECE Providers | | Long Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------------|-----------------------|--------------|------------------------------|
| DC | Early Childhood Educator Pay Equity Fund "Eligible early childhood educators can receive up to four payments of up to \$3,500 each between October 2022 and September 2023. In FY24, which begins Oct. 1, 2023, OSSE will distribute funds directly to child development facilities through a child development facility (CDF) payroll funding formula. To receive funds from the CDF payroll funding formula, child development facilities must be licensed by OSSE and agree to pay eligible early childhood educators, by position and degree, salaries that meet or exceed the minimum salaries established by OSSE for FY24." Source: US HHS, ACF, ECD, Examples of State and Local Early Childhood Workforce Strategies and Early Childhood Educator Pay Equity Fund | No | | ECE Providers | | Long Term |
| GA | "Atlanta started paying new special education teachers \$3,000 bonuses, and within a month, all the vacancies were fullThis school year, Atlanta started offering those incentives to all special education teachers as part of a pilot program. Eligible teachers will receive step increases based on years of experience, and those in the middle of their careers, with five to 15 years of experience, will receive an extra pay boost. The board also approved stipends for teachers in hard-to-fill areas. More than 400 special education teachers will receive a \$3,000 stipend. Teachers at 32 schools with the district's highest percentage of low-income students will receive payments of \$1,000 to \$2,000." Source: Atlanta schools' budget includes raises, more mental health services (The Atlanta Journal Constitution) | Yes | State | Prek-12 teachers | | Short Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------------|-----------------------|--------------|------------------------------|
| GA | Short-Term Assistance Benefit for Licensed Entities (S.T.A.B.L.E.) "financial assistance to help stabilize child care providers facing decreased enrollments and increased operating costs during COVID.STABLE payments may be used to pay for salaries and benefits for lead teachers, assistant teachers, and other employees; substitute teachers; tuition relief for families; lease or mortgage payments; utilities; cleaning supplies; classroom materials and supplies; unreimbursed food; and additional supplies required by Centers for Disease Control and Prevention (CDC) guidelines." Source: US HHS, ACF, Office of Child Care, OCC TA Network, "Lead Agency Examples of COVID-19 Relief Funding" | Yes | | ECE Providers | | Short Term |
| HI | In 2020, Hawaii started paying special education teachers \$10,000 more per year. Before the incentive, in October 2019, almost 30% of the state's special education positions were vacant or staffed by teachers without appropriate licenses, district data shows. By October 2021, that number dropped by half, to about 15%. Source: Schools are struggling to hire special education teachers. Hawaii may have found a fix. | Yes | State | Prek-12 teachers | | Short Term |
| IL | Child Care Workforce Bonus Illinois' licensed family child care, licensed centers, and license-exempt centers that care for Children receiving state child care subsidies offered one-time bonuses of \$750-\$1200 per staff member. Source: US HHS, ACF, ECD, Examples of State and Local Early Childhood Workforce Strategies | Yes | | ECE Providers | | Short Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------------|-----------------------|-----------------|------------------------------|
| IL | Illinois Child Care Restoration Grants (CCRG) CCRGs were used to support child care programs during the pandemic and recovery. The grants help stabilize the child care programs operating during the pandemic by providing funding to address reduced enrollment, increased operating costs, and help mitigate staffing challenges. Source: US HHS, ACF, Office of Child Care, OCC TA Network, "Lead Agency Examples of COVID-19 Relief Funding" | Yes | | ECE Providers | | Short Term |
| IL | IL El Provider 10% Rate Increase "In Illinois' FY24 Budget, which includes the Smart Start Illinois Plan, there will be rate increases to all 16 Core El Services. This historic investment in the Early Intervention Program reflects the administration's commitment to ensure that infants and toddlers with delays and disabilities receive the services needed for healthy development." Source: Early Intervention Provider Information Notice- Rate Increase Effective July 1, 2023 | No | State | El Personnel | | Long Term |
| KS | Early Childhood Shared Resources "Kansas is using CCDF COVID-19 relief funding to develop a platform to provide access to pooled resources and services for child care providers. Through this platform, providers can purchase telehealth and teletherapy services for themselves and their families for less than \$20 per month. It will offer basic medical coverage and mental health support with prescription-writing discounts and access to non- emergency medical care." Source: US HHS, ACF, ECD, Examples of State and Local Early Childhood Workforce Strategies | Yes | | ECE Providers | | Short Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------|--|-----------------|------------------------------|
| KY | Categorical Eligibility "In October 2022, Kentucky enacted categorical eligibility for educators and staff working in child care settings to ensure they can access child care subsidies for their own children Categorical eligibility in this case means that qualifying individuals can access child care assistance because they belong to this "category" — or "protected population" — regardless of their income. Qualifying individuals are those working at least 20 hours per week in licensed child care centers and family child care homes." Source: NAEYC Providing Child Care for Child Care Providers: A Strategy for Addressing Staffing Shortages and Compensation for Early Childhood Educators, December 2022 | Yes | | ECE Providers | | Short Term |
| ME | The Educators for Maine Program "This program is a competitive, merit-based, forgivable loan for Maine students enrolling in or pursuing undergraduate or graduate education degrees. Applicants must demonstrate an interest in careers in education or child care and plan to work in Maine after graduation. Borrowers may have one year of their loan forgiven for each year of eligible return service as a teacher, including speech pathologist, or child care provider." Source: Educators for Maine Program | No | State | ECE Providers and Speech- language Pathologists | | Long Term |
| ME | Maine established a permanent policy with state funds to provide a \$200 monthly wage enhancement for child care providers and early childhood educators. This program started off using federal relief funding. Source: Title 22, §3737-A: Early childhood educator workforce salary supplements | Yes | State funding | ECE Providers | | Long Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|---|----------------------------|---|-------------------------------------|-----------------|------------------------------|
| MS | SLPL – Speech-language Pathologist Forgivable Loan Forgiveness Program "available to students seeking a first master's degree in Speech-Language Pathology, Communicative Disorders, or Communication Sciences and Disorders. Loans forgiven for recipients who serve as licensed speech-language pathologists in a Mississippi public or charter school for one year for each year of funding received. Loan recipients who choose not to fulfill the service obligation will be required to repay the loan in full with a penalty of 5% and interest." Source: TWG Member (personal Communication) and SLPL – Speech-Language Pathologist Forgivable Loan | No | State Funding | Speech- language Pathologists | | Long Term |
| МТ | Employee Housing Initiatives Many districts in Montana are attempting to provide employee housing due to the cost of living. Using philanthropic and state funding, districts renovate existing buildings, or construct new housing facilities within their districts to provide affordable housing options to recruit and retain teachers, including special education teachers. Sources: TWG Member (Personal Communication) and online sites: First affordable housing units open for Big Sky teachers and Teacher Housing Initiative North Yellowstone Education Foundation has a solution! | No | State general funds and habitat for humanity, philanthropy | Prek-12 teachers | | Long Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------------|--------------------------------|--------------|------------------------------|
| MT | Quality Educator Loan Assistance (QELA) Program "Through HB 211, the 2019 Montana legislature renewed the quality educator loan assistance program as a recruitment and retention aid for rural schools. The OPI is responsible for administering the program. Newly hired quality educators who teach or work at an "impacted school" are eligible to receive state-paid loan assistance for up to four years, so long as they remain a full-time employee at an impacted school." Source: Quality Educator Loan Assistance (QELA) Program | No | State and Federal | ECSE teachers | | Long Term |
| NC | North Carolina provided a one-time retention bonus to primarily Service Coordinators if they agreed to continued employment for 18 months. If staff leave before that time, they are required to pay the funding back to the state. This was an effort to stabilize the workforce while continuing to recruit personnel. Source: TWG Member (personal Communication) | No | State general funds | Part C Service Coordinators | | Short Term |
| NC | "NC designed the North Carolina Teaching Fellows Program to meet the areas of most need in the State — special education, STEM fields, prioritizing low-performing schools. Students enroll at one of eight select educator preparation programs and receive up to \$4,125 per semester in financial aid, enrichment experiences, a network with the full state cohort of Teaching Fellows at statewide enrichment events, individualized coaching, and professional development for beginning teachers." Source: North Carolina Teaching Fellows Program | No | State Funded | ECSE Teachers | | Long Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|---|-----------------------|-----------------|------------------------------|
| NM | "Our district [Santa Fe Public Schools] has opened the first full-day childcare learning center in New Mexico for district employees, giving teachers' children first priority. The center serves children 1-3 years old. old and follows a Reggio Emilia model." "The Santa Fe school board passed an emergency resolution, creating a task force to address the educator housing crisis. The district is in the process of building low-income housing for educators. We are working with legislators to approve the placement of housing in the city." Source: TWG Member (personal Communication) Affordable Housing for Teachers: It's on the Table Now and Santa Fe Public Schools Early Childhood Center | No | State general funds | Prek-12 educators | | Long Term |
| VA | RecognizeB5 Program Virginia offers up to \$1500 to ECE personnel if they remain teaching at their site over an 8-month period. (ECE settings - child care, Head Start, School-based PreK) Source: Recognize B5 Program and The Importance of Financial Supports for Child Care Teachers: Findings from Year 3 of Virginia's Recognition Program | Yes | State ECE funds, PDG B-5 federal grant | ECE Providers | | Short Term |
| VT | "The Student Loan Repayment Assistance Program for Vermont's early childhood educators provides up to \$4,000 annually to reduce the student debt of full-time educators who earned an early childhood related degree." Sources: US HHS, ACF, ECD, Examples of State and Local Early Childhood Workforce Strategies and Student Loan Repayment Assistance Program | No | State- funded | ECE Providers | | Long Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------------|---------------------------------|---------------------------|------------------------------------|
| WA | Fair Start for Kids Act includes a provision for employees of licensed child care facilities who meet income eligibility guidelines to qualify for health insurance coverage for \$0 monthly premiums through Washington Healthplanfinder. Sources: Health Care Premium Assistance for Employees of Child Care Facilities and Fair Start for Kids Act, Washington State Department of Children, Youth, and Families | No | State and Federal | ECE Providers | | Long Term |
| WI | Statewide Minority Teacher Loan Program This program funds student loans for teacher candidates enrolled in a Wisconsin college or university preparation program and preparing to become certified in a teacher shortage area. Recipients agree to teach in a Wisconsin school district serving 40% or more low-income students and, in turn, have their loans forgiven at a rate of 25% per year. | No | General funds | Prek-12 Teachers of color | Goal to promote diversity | |

Grow Your Own Programs

There is a growing body of research suggesting that how service providers are prepared impacts attrition, or turnover. The impact of preparation on attrition may be most pronounced for ECE/ECSE teachers serving in public school settings and programs. Specifically, teachers who entered the profession via alternative pathways to teacher licensure such as fast-track and lateral entry programs are two to three times more likely to leave teaching after their first year (Sutcher et al., 2016; Zhang, & Zeller, 2016). Likewise, when educators do not complete a traditional four-year preparatory program or complete an out-of-state teacher education program, they are more likely to leave teaching, both during and at the end of the school year (Redding & Henry, 2019, Gilmour & Wehby, 2020). Yet access to higher education for early childhood educators who want to earn teacher licensure can be challenging due to cost, timing of course offerings, and the need to balance work, study, and family obligations. One strategy that communities have used to address these challenges is known as Grow Your Own Programs.

Grow Your Own (GYO) programs are defined as "a partnership between local communities and educator preparation providers (EPPs) to select candidates (paraprofessionals, graduating high school seniors, career changers) from local communities to earn their degree and educator license to teach" (Donaldson, Barron, & Jackson, 2022). These partnerships between institutions of higher education and local communities reduce barriers and increase access to higher education, which strengthens the workforce while allowing individuals to stay in their community (Acosta & Holdheide, 2021; Barth et al., 2016). GYO programs are successful when they: offer financial aid (including scholarships and loan forgiveness) to program completers who meet service requirements (State of Washington Professional Educator Standards Board, 2016); communicate and recruit specific populations, which may begin in high schools or middle schools (Carver-Thomas, 2018; Texas Comprehensive Center, 2018); provide practice-based coaching and mentoring during preservice, clinical experience, and induction phases (Texas Comprehensive Center, 2018; Carver-Thomas, 2018); and provide social, emotional support in particular for first generation college students (United States Department of Education, Office of Special Education Programs, n.d.) According to the US Department of Education, Office of Special Education Services, GYO programs focused on early childhood education have found success in recruiting and retaining diverse educators. Of the three GYO programs studied, all three had partnerships with child care resource and referral networks, alignment with credentials or degrees, and effective articulation agreements between two- and four- year institutions (Gardner, Melnick, Meloy, & Barajas, 2019).

Examples of Grow Your Own programs include:

- Highschool Teacher Certification Pathways where high school students gain experience
 working in inclusive early childhood settings while receiving credit toward a credential or degree
 in a local 2- or 4- year degree program in Louisiana and Washington.
- Local School/IHE/Community-based programs where school districts, local institutions of higher education, and local programs who want to recruit and grow educators from their own communities provide a place-based pathway toward teacher certification. Maryland is one example of this type of GYO program.
- Alternative Pathways to teaching for current professionals in a different or related field or for paraprofessionals already working in special education or early intervention who want to earn a teaching certificate in Chicago, Illinois, Nevada, Alaska, Milwaukee, Wisconsin.
- **Apprenticeships** where ongoing coursework is completed while educators continue to teach in their workplace under the supervision of a mentor in California and Colorado.

Spotlight on Increasing El/ECSE Workforce Diversity

Grow Your Own programs can be an effective way to attract and retain a workforce that matches the diversity of a community. These programs typically recruit locally, offer financial assistance, and create a system of support from mentors, advisors, and peers for students within their community. For EI/ECSE personnel of color the time (courses offered in the evenings or asynchronously so that individuals can pace their own learning), money (tuition incentives specifically for students of color), and flexibility (in pathways, degrees and certifications) that Grow Your Own Programs offer increases the likelihood that students of color will complete their degree or certification process and choose EI/ECSE as a career (Carver-Thomas. 2018; Dixon, Griffin, & Teoh, 2019; Scott & Alexander, 2019).

Additional state and local examples of Grow Your Own Programs are included in Table 2.

Table 2. Grow Your Own Programs: State and Local Examples

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------------|-----------------------|-----------------|------------------------------------|
| AK | Alaska Teacher Recruitment and Retention Strategies • changing the retirement options, • creating a pathway to teacher for student aides • streamlining the certification process Source: News Nation: State-by-state teacher shortages (and what they are doing about it) and Teacher Retention & Recruitment Convening: Implementation of TRR Action Plan | No | | Prek-12 Teachers | | Long term |
| CA | "The YMCA of the East Bay serves 1,200 children across four counties in Head Start, Early Head Start, state-funded preschool, and child care settings. In 2015, with support from an Early Head Start — Child Care Partnership grant, the YMCA recruited 21 parents to participate in a teacher training program. Through the practice-based program, all earned a California state-based teaching credential. Since that time, the YMCA has expanded their Early Educator Apprenticeship Program to serve additional apprentices, many of whom go on to earn their associate's and/or bachelor's degree." Source: US HHS, ACF, ECD, Examples of State and Local Early Childhood Workforce Strategies and Early Childhood Impact YMCA of the East Bay Annual Report 2019–2020 | No | | ECE Providers | | Long term |

| CA | ARES | • | Eligible personnel | Equity focus | Short- or long-term solution |
|----|------|---|-----------------------|--------------|------------------------------|
|----|------|---|-----------------------|--------------|------------------------------|

CA The Pilot Early Childhood & Special Education Apprenticeship Program

"This CA apprenticeship program officially began in Fall 2021 as a formal partnership between the CCSF Child Development and Family Studies Department and San Francisco Unified School District, thanks to funding from the Strong Workforce Program (SWP). Apprentices begin as an Early Childhood Teaching Assistant, a Transitional Kindergarten Teaching Assistant or a Special Education Paraprofessional working in Pre-K and Kindergarten classrooms.

The programs are designed to infuse Special Education training for all teachers since all teachers work with children with special needs and need this knowledge and skill set. Apprentices can apply to work 1-1 with a child with Special Needs or apply to be a teaching assistant in a TK or Early Childhood classroom. The apprenticeship lasts up to 34 months and has two tracks. Both lead to an Early Childhood Teaching Permit, with an option to earn a Site Supervisor permit, and Track 2 leads to an AS-T Degree in Early Childhood Education, becoming a pathway to teaching TK-12 or Special Education."

Source: City College of San Francisco: Early Childhood & Special Education Apprenticeship

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------|-----------------------|-----------------|------------------------------------|
| CO | "CO is using their ARP Supplemental funds to help eligible childcare providers recruit and retain early childhood professionals. Eligible providers may use grant funds for employee benefits, employee compensation, professional development, and hiring additional staff. The state is also providing opportunities for free educational coursework to help bring new professionals into the field. This effort will provide a pathway to employment as an ECE educator without the upfront cost of coursework and help address Colorado's overall unemployment concerns. Combining free coursework with work experiences through apprenticeship programs and teacher peer mentorship programs, ECE professionals will have opportunities to obtain paid work experiences while pursuing credentials or degrees, and gain support along the way from a mentor educator." Sources: US HHS, ACF, ECD, Examples of State and Local Early Childhood Workforce Strategies and State and Education Workforce | Yes | | ECE Providers | | Short tern |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|---|--|--|------------------------------|
| CO | Teacher Recruitment Education and Preparation (TREP) "This program creates the opportunity for qualified high school students in an educator high school career pathway to continue their formal educator pathway into college by enrolling in tuition-free post-secondary educator preparation courses for the two years after 12th grade. Objectives are to increase the percentage of students who participate in postsecondary educator preparation programs, especially among low-income and traditionally underserved high school students, and to create a more diverse teacher workforce to reflect the ethnic diversity of the state." Source: State of the States 2023: Policies to Increase Teacher Diversity | No | State- per-pupil state funding | Prek-12 Teachers of color - to promote diversity | The goal is to increase the % of low-income and traditionally underserved high school students in postsecond ary educator prep programs to create a workforce that reflects the ethnic diversity of the state. | Long Term |
| GA | The Interdisciplinary Personnel Preparation for Early Speech, Physical, and Occupational Therapy Services (Early SPOTS) "This Program provides specialized training to graduate students in SLP, PT, and OT programs. Scholars will gain interdisciplinary knowledge and skills on early intervention (EI) services for infants and young children with significant disabilities and their families. The Early SPOTS program seeks to alleviate the statewide shortage of highly qualified personnel in occupational therapy, physical therapy, and speech-language pathology who are able and willing to work collaboratively in early intervention and schools." Source: Early SPOTS Program | No | Federal | SLP, PT, and OT for EI | | Long Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|---|----------------------------|-----------------------------|---|---|------------------------------|
| IL | The Teach Chicago CPS Residency "this residency is a full-time, paid training program offering a bridge to teaching for those who would like to get into the profession or move into a teaching role from a classroom support position. The program's mission is to recruit, prepare, and retain a diverse base of culturally competent professionals who can successfully teach high-needs subjects—bilingual education, special education, STEM, arts, and ECE—to students in underserved communities citywide" Source: Follow Your Passion For Teaching | No | State | Prek-12 teachers | Mission is to recruit and retain a diverse workforce | Long Term |
| IL | Grow Your Own Illinois "Grow Your Own supports and encourages individuals who are ready to share their wisdom as teachers and mentors in their home neighborhoods." The program offers financial and academic assistance, social-emotional support, and culturally sustaining instructional strategies. If necessary, programs can also offer financial assistance for things like child care, transportation, etc., to support participation in the program. "The Diverse Male Teacher Initiative (DMTI) is a scholarship program aimed at increasing the number of men of color going into the teaching field. The Initiative is focused on men enrolling in or already enrolled in community colleges, with funding to take the prerequisite courses necessary to enter teacher licensure programs." Source: State of the States 2023: Policies to Increase Teacher Diversity; Public Act 101-0122: Amendments to The Grow Your Own Teacher Education Act and Grow Your Own Teachers | No | General State Funds | Prek-12 teachers in hard-to-staff teaching profession (includes special education) | Goal of the program is to diversify the IL teaching workforce. Specific GYO initiative for men of color. | Long Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------------|------------------------|--|------------------------------|
| LA | "The Louisiana Pre-Educator Pathway cultivates highly skilled educators by guiding young people on a path to becoming accomplished teachers, beginning in high school and extending through college and into the profession. Through high-quality curriculum focusing on anti-bias instruction, classroom culture, professional collaboration, understanding assessments, and authentic engagement, the pathway aims to address workforce needs related to the recruitment and retention of teachers of color while expanding Grow Your Own initiatives across Louisiana. Students enrolled in the Pathway complete two education focused courses (Multicultural Learning Communities & Foundations of Education) and two portfolio based micro credentials while participating in classroom and clinical experiences that propel them on their path to become a highly effective educator." Source. Louisiana Pre-Educator Pathway | No | State- funded | Pre-k - 12 teachers | Pathway includes coursework and training related to anti-bias instruction and multicultural learning communities . | Long Term |
| MD | "Maryland Leads is a grant initiative designed to support Local Education Agencies (LEAs) in utilizing federal funds to overcome the learning loss resulting from the COVID-19 pandemic, accelerate student learning to narrow opportunity and achievement gaps, and provide more targeted support for historically underserved students, and their communities. Maryland Leads also supports LEAs in addressing short and long-term challenges related to the current labor shortage and attends to the longstanding need to establish and strengthen teacher pipelines and development. Counties can apply for funding on R&R strategies: Grow Your Own Staff, Staff Support and Retention." Source: Maryland Leads Initiative | No | Federal | ECE-K12 Teachers | Goal to strengthen teacher pipeline in historically underserved communities | Long Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------------|---|---|------------------------------|
| NC | "North Carolina Agricultural and Technical University used IDEA grant funding for scholarships and stipends to support students pursuing master's degrees in special education, with a goal of increasing the diversity of special education teachers in the state." Source: North Carolina Agricultural and Technical State University: Master of Arts in Teaching (MAT) Program | No | IDEA Grant Funding | ECSE Teachers | Goal is to increase the diversity of teachers | Long Term |
| NV | Nevada Early Intervention Professional Development Center "The Nevada El Professional Development Center was created and legislatively funded with American Rescue Plan Act (ARPA) grant funds to facilitate this retention initiative of new professional development options, the first being a Developmental Specialist Core Series (DS Series) that will be provided at no cost to El professional learners. The DS Series begins in April 2023 and will be comparably rigorous to current, traditional paths to El educator licensure and will meet federal requirements for the El Developmental Specialist position." Source: Nevada Early Intervention Professional Development Center | Yes | | Part C Early Intervention Professionals | | Short Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|---|----------------------------|-----------------------------|--|-----------------|------------------------------------|
| OK | Non-traditional Route to Special Education Certification "The Non-Traditional Route to Special Education Teacher Certification provides a method for individuals with a minimum of a bachelor's degree to obtain a special education certification. Candidates must complete a 150-hour program that includes 120 hours of special education training known as "Boot Camp" and 30 hours of field experience. Upon completion, the State Board of Education will issue a one-year provisional certificate to teach in the area of mild/moderate or severe/profound disabilities in grades PreK-12." Source: Non-Traditional Route to Special Education Teacher Certification and Non-Traditional Route to Special Education Teacher Certification Brochure | No | State and Federal | ECE and preK-12 special education teachers | | Long Term |
| SC | SC-CREATE (Centers for the Re-Education and Advancement of Teachers in Special Education and Related Services Personnel) "This program allows full-time employees in SC public schools to receive tuition-free coursework to complete add-on, alternative, or initial licensure in special education, the Board-Certified Behavior Analyst (BCBA) credential, Speech-language Pathologist (SLP) national certification (ASHA-CCC). School Psychologist licensure and Certification of Orientation and Mobility Specialist are also available for qualified employees with a recommendation from their district." Source: Subject-Area Recruitment Programs | No | State and Federal | Special education teachers and related services personnel | | Long Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|---|----------------------------|---------------------------|--|-----------------|------------------------------------|
| WA | Bilingual Educators Initiative (BEI) "BEI is a high school career academy program designed for bilingual high school students to prepare to become certified bilingual educators in the state. Funded at \$1 million in 2022, the program currently disburses grants to seven district grantees." Sources: State of the States 2023: Policies to Increase Teacher Diversity and Bilingual Educators Initiative Grants | No | General State Funds | Prek-12 - to promote bilingual teachers | | |
| WA | My Brother's Teacher "MBT seeks to diversify the early learning workforce by recruiting male high school Black and Brown students from the Greater Seattle area to complete college coursework in early childhood education at North Seattle College (NSC) and funded summer internships in Seattle's early learning programs. These young men will receive 60 service-learning hours and ongoing mentorship for their work. Although programming provides a supported path to and through college to pursue careers in education, Fellows are only committed to completing Phase 1 of the My Brother's Teacher pathway." Source: University of Washington: Cultivate Learning | No | | ECE/ECSE Providers | | Long-term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|---|----------------------------|-----------------------|-----------------------|--------------|------------------------------------|
| WI | Milwaukie Next Door's Pathways Program "This program offers educational opportunities for those new to early childhood education – and those who have been long-time Next Door employees. The Pathways Program offers several different options to earn early childhood education credentials – all at no charge to participants. All participants receive free training, tuition and fees for all program, academic / coaching/wellness support, and technology as needed. All educational programs are offered through Milwaukee Area Technical College (MATC)." Sources: Next Door Pathways Program A pathway to your career; August 1, 2023 presentation: PMFO, OHS TTA Summer Meeting | No | | ECE Providers | | |

Public Awareness about Career Opportunities

The lack of public awareness about the value of EI/ECSE professions, alongside low compensation and limited benefits for these educators, contribute to the perception that an early childhood job is not, in fact, a promising career path. There is evidence that this perception also persists for K-12 teachers. In 2018, only 34% of teachers reported that they felt the education field was valued (Wiggan et al., 2021). Researchers suggest that many workers view teaching as a semi profession until they acquire a "real" job in other fields (Wiggan et al., 2021; Darling-Hammond, 2010). Overcoming such public perception requires a robust strategy to promote educational settings as attractive workplaces and to market teaching as a viable career choice.

One such early childhood initiative is the National Association for the Education of Young Children (NAEYC) Power to the Profession initiative. This initiative, led by NAEYC in partnership with other national early childhood organizations, created a "Unifying Framework" to help define the early childhood education profession and make recommendations about the roles and responsibilities of ECE professionals, clear pathways to degrees and credentials, and professional compensation. This initiative is solidly focused on the ECE workforce, unites its members, and relies upon a dynamic social media presence to promote ECE as a viable and worthwhile profession whose members are critical to our country's infrastructure, and who deserve a compensation on par with other key industries. The efforts of this initiative raise the visibility of the profession and market ECE as a worthwhile career choice.

An additional example of this type of national campaign focused specifically on the early intervention profession is <u>Be Part of El</u>. This campaign was a collaboration with the Early Childhood Personnel Center and the Division for Early Childhood to raise public awareness of Early Intervention as a viable and promising career path. In addition to a public awareness campaign, the collaborative also developed a webpage for anyone interested in learning more about a career in early intervention.

These two national approaches to raising awareness are illustrative, but public awareness campaigns do not have to occur at the national level, educational organizations at the local level can borrow such strategies from other industries where employee-facing branding is critically important. A strong employee-facing brand sells the district or program as an employer, which assists in attracting and retaining educators. Organizations must convince educators to choose them, in an era of constant information flow and a focus on social media. While the brand or reputation of a company is not the most important consideration for job seekers, more than one-third (36%) say it is "very important" when evaluating whether to accept a potential job (Gallup, 2017).

Spotlight on Increasing El/ECSE Workforce Diversity

Prospective early interventionists, early childhood special educators, and related service providers from diverse backgrounds seek a fit with their values, cultures, and lived experiences when choosing a career. They seek employment that allows them to build on their individual strengths and pursue interests. For example, Moerchen et al., found that students who chose physical therapy as their career choice often based that decision on values and fit, and that this was particularly true for underrepresented minorities and disadvantaged students (2018). Values and fit included things like patient-therapist relationship and diversity and inclusion. They conclude that "These themes should be visibly incorporated into recruitment strategies and evident on educational program and/or professional websites" (Moerchen et al., 2018, p.217). Today's employees want a specific experience in addition to a salary. As a result, schools and programs need to shift their approach to attract diverse prospective

El/ECSE personnel. Instead of hiring to fill a position, organizations need to develop a systematic approach to identifying the right fit with an individual's values and interests and assimilate new hires onto teams where their strengths can be optimized (Gallup, 2017). Dixon, Griffin, & Teoh suggest that effective efforts to attract teachers of color include strategies such as loan forgiveness, service scholarships, loan repayment incentives, and relocation incentives for coming into the field (2019, p.3). Additionally, including teachers of color in the hiring process, partnering with local teacher preparation programs at minority-serving institutions, and hiring earlier in the year to attract in-demand candidates of color, can also support attracting diverse applicants (Carver-Thomas, 2018, p.vii).

Additional details about states' or local communities' efforts to increase **Public Awareness about Career Opportunities** are included in **Table 3**.

Table 3. Public Awareness about Career Opportunities: State and Local Examples

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-tern solution |
|-------|---|----------------------------|-----------------------|-----------------------|--------------|------------------------------------|
| AL | WeTeachAlabama.com Alabama launched a recruitment website, along with a series of changes that include expanding the process of getting a teaching certificate faster and increased pay for rural teachers." Source: State-by-state teacher shortages (and what they are doing about it) | No | | Prek-12 Teachers | | |
| FL | TeachPalmBeach "This social media and video vignette campaign on Twitter is designed to improve the public perception of teaching by highlighting stories of local teachers who have made a difference in the Palm Beach, Florida, community." Source: Attracting Personnel: Changing Public Perception and Teach Palm Beach on X | No | | Prek-12 teachers | | Long Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|---|----------------------------|--|------------------------------|
| IL | Community Outreach Committee "Illinois Occupational Therapy Association (ILOTA) has created this committee to increase awareness of occupational therapy (OT) as a profession within various communities throughout the state. We have committee members working on 1) creating resources targeting people of different ages and learning styles that provide basic information about the profession; 2) connecting with others in the community [such as career counselors, schools, libraries] to connect them with OT volunteers to serve at career fairs or speak at career information events; and 3) implementing a 'Pre-OT Mentoring Program' to match high school or undergraduate students with OT practitioner and student mentors to support them in learning more about the OT profession and/or preparing to apply to OT/OTA programs." Source: TWG Member (personal communication) and ILOTA Pre-OT Mentorship Program | No | Members hip and conferenc e fees | Occupational Therapists | | Long Term |
| IL | Teach Chicago Chicago Public School (CPS) developed a website with dynamic and easy access to information on teaching (including early childhood special education) as a career choice. Source: Teach Chicago and The Opportunity Schools Initiative: How Chicago Public Schools Recruits, Retains and Develops High-Quality Teachers for Hardto-Staff Schools | No | State | Prek-12 teachers | CPS's Opportunity Schools Initiative addresses equity by recruiting and retaining educators to work in hard- to-staff schools. | |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|---|----------------------------|-----------------------------|-----------------------|--|------------------------------|
| KS | Educate Kansas "A project to support recruitment and retention efforts across Kansas. The project supports a robust marketing initiative for the purpose of rebranding the profession statewide in collaboration with key stakeholders such as KNEA, KSDE, TASN, Higher Education, and District Level Leadership. Additionally, Educate Kansas partners with leaders at the local level to assist in strengthening progressive recruitment and retention strategies. This project endorses strong collaborative teacher retention practices. Educate Kansas has developed a research-based survey in collaboration with K-State that collects data from current educators around retention. The project provides the district with a data profile to allow for analysis, strategic planning, and goal setting." Sources: Educate Kansas and Be the Teacher They'll Always Remember | No | | PreK-12 | This project is collecting and using data to inform their efforts to promote equity across the workforce by using demographic , location, subject matter expertise, etc., to inform recruitment and retention, | Long Term |
| MI | OPTIMISE – Opening the Pipeline of Talent into Michigan's Special Education "This task force is strategically engaged in (mission statement) building, supporting, and sustaining a new education system that can enthusiastically attract, prepare, and retain an effective and diverse special education workforce." Sources: TWG - personal communication and OPTIMISE | No | | ECSE teachers | Efforts aim to increase the diversity of the SE workforce. | |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|--|--|--|------------------------------|
| NM | Teaching is Changing Lives A campaign and one-stop portal for information on teaching, including PreK. This site includes information about pathways into and through the teaching profession, including alternate certification for prospective teachers, individuals who have noneducation degree, and current teachers who want to hold administrative positions Prek-12. The site also includes current openings and educator testimonials via YouTube video links. Source: Teaching is Changing Lives | No | | Prek-12 Teachers | The site includes information on Pathways and Supports for Bilingual and Native Youth. | |
| TN | Recruitment Stickers "Knox County Schools (KCS) employs a simple strategy to recruit teachers: stickers. School board members, the mayor, and others keep stickers on hand to pass on to anyone interested in a career in the classroom, enabling people beyond the district's recruitment team to engage potential new teachers. The stickers say, "Join our team," and have a QR code that brings people to a fillable form, and routes directly to a recruiter and automatically helps people schedule a time to talk with a recruiter." Source: National Council on Teacher Quality Teacher Contract Database: Knox County Schools | No | General funds/loc al school funding | Prek-12 Teachers of color - to promote diversity | | Long-term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|---|----------------------------------|--------------|------------------------------|
| TX | Texas Education Agency (TEA) #IAmTXEd Campaign. "#IAmTXEd is a TEA-led social media campaign intended to improve the perception of the field of education by sharing ongoing success stories of Texas practitioners. The State campaign collects and disseminates the stories of educators whose work is leading to improved student outcomes and achievements. Social media posts are shared statewide weekly via Facebook, Twitter, and Instagram and have generated a lot of engagement and interaction with followers." Sources: Attracting Personnel: Changing Public Perception and #IAmTXEd | No | Federal and State Educatio n Funds | Pre-K–12 Teachers (Part B) | | Long Term |

Ongoing Professional Learning and Practice-Based Opportunities

Even when teachers enter the profession to make a difference in children's lives and have the benefit of preparation in a traditional four-year undergraduate program, research is clear that professional development for new educators entering the profession and for experienced educators continuing to develop skills is critical to retention (Koch, 2018). Professional development and learning for EI/ECSE personnel must focus on strategies and interventions related to the developmental age and unique nature of the children and families they serve (US Department of Education, Office of Special Education Programs, n.d.). For example, each state comprehensive system of personnel development (CSPD) should consider the characteristics of their EI/ECSE workforce and develop in-service professional development that will address the needs of their state based on a statewide workforce needs assessment. Participating in high-quality, relevant professional development and learning opportunities decreases attrition (Billingsley & Bettini, 2019). For service providers such as school-based speech-language pathologists (SLP), occupational therapists (OT), and physical therapists (PT), collaborative learning opportunities on the job – across all special education staff and related service providers—can promote retention by increasing mentorship and sharing of best practices (Farguharson et al., 2022).

Mentoring and Coaching

For inexperienced EI/ECSE personnel, support during the start of employment is essential. Formalized support that lasts at least three years, including professional development, learning opportunities, and mentoring programs increase retention and student achievement (Koch, 2018). One critical component of this support is mentoring. For example, new teachers who meet weekly with a mentor report that it improves their instruction, and they remain in the field (Koch, 2018).

The selection of mentors is important. Staff are more likely to leave if they do not have induction and mentoring support from trained mentors with their same licensure area and who serve in the same roles (Sutcher et al., 2016). Mentors who have knowledge of their mentees' context are helpful but engaging in coaching with someone with expertise in early childhood education/early childhood special education is more beneficial. Where mentors provide support on general aspects of teaching, coaches focus on instruction itself.

Coaching centers on efforts to apply specific interventions or teaching strategies (Sheridan, Edwards, Marvin, & Knoche, 2009). In addition to focused observations and follow up debriefing conversations, coaches may also model strategy implementation. Coaching can also support supervising El/ECSE personnel. For example, SLPs can use coaching in their ongoing work with paraeducators and SLP assistants. Practice-based coaching of these providers, who by nature of their roles spend the most direct service time with young children, can help SLPs feel less overwhelmed as shared competency across the team delivering direct intervention services increases (Dennis et al., 2023). In inclusive settings, cross-disciplinary competencies can guide coaching efforts as El/ECSE work collaboratively. Resources such as the Cross Disciplinary Competencies (Bruder et al., 2019) which was developed by the Early Childhood Personnel Center in collaboration with the American Occupational Therapy Association (AOTA), American Physical Therapy Association (APTA), American Speech-language - Hearing Association (ASHA), Council for Exceptional Children (CEC), Division for Early Childhood (DEC) of the Council for Exceptional Children, National Association for the Education of Young Children (NAEYC), and Zero to Three, can help align practices and inform coaching for the full El/ECSE team.

Because coaching often occurs in inclusive classrooms and as they are interacting with children, it is a powerful practice in a continuous improvement cycle for the full team.

Strategies in this area include:

- Relationship-based PD (training or coursework combined with coaching or technical assistance)
 offered to early interventionists, early childhood special educators, and related service providers
 to boost inclusive practices,
- Competency-based coursework, or credentialing (including micro-credentials and digital badging).
- Residency programs that provide a fully immersive teacher preparation path for individuals already working in a program or school, and ongoing training related to inclusive practices (sequenced, facilitated, group training).

What separates the strategies in this area from similar GYO strategies is that these efforts are aimed at professionals already working in EI/ECSE. The strategies have the specific goal of providing professional development that helps upskill, promote, and retain an existing workforce.

Spotlight on Increasing EI/ECSE Workforce Diversity

Ongoing relationship-based professional development is critical to retaining a diverse EI/ECSE workforce. A strong relationship with an individualized coach or mentor can support EI/ECSE personnel retention, particularly when the coach or mentor shares the mentee's background so that they relate to and understand their lived experiences (Dixon et al., 2019; Lopez-Estrada & Koyama, 2010; Scott & Alexander, 2019). Developing a strong relationship with mentors and colleagues from similar racial and ethnic groups helps diverse EI/ECSE personnel trust that they are seen and heard, and that they are part of a work environment that is respectful and inclusive (Carver-Thomas, 2018; Dixon et al., 2019; Ford, Smith, & Banister, 2021).

Examples of state and local strategies on **Professional Development and Practice-Based Opportunities** are included in **Table 4**.

Table 4. Professional Development and Practice-Based Opportunities

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|---|----------------------------|-----------------------------|-----------------------|--|------------------------------|
| AR | TEACH Scholarships "Arkansas used ARPA funding to cover scholarships for early childhood teachers to obtain a degree or credential in the field while they are working with young children. Funding is disseminated by the Arkansas Early Childhood Association using the national TEACH model." Source: US HHS, ACF, ECD, Examples of State and Local Early Childhood Workforce Strategies and American Rescue Plan Proposal: Division of Child Care and Early Childhood Education | Yes | | ECE Providers | | Short Term |
| CA | Educator Effectiveness Block Grant "The state has a \$1.5 billion Educator Effectiveness Block Grant to help teachers earn certain credentials or certifications in high-need topics such as accelerated and social-emotional learning. " Source: State-by-state teacher shortages (and what they're doing about it) and Educator Effectiveness 2021–26 | No | | Prek-12 Teachers | Purpose of the program is to promote educator equity, quality, and effectiveness | Long-term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------------|-----------------------|--------------|------------------------------|
| СО | The Preschool Development Grant (PDG) Inclusion and Universal Design Program "A Colorado program to increase inclusion and diversity accessibility in home- and center-based child care. The goals of this program are to expand Colorado's child care provider capacity and ensure children with a wide variety of delays and disabilities are included in these settings. Twenty-five applicants will be offered training, technical assistance, and kits containing equipment and resources. This will help these applicants support the development of inclusive learning environments." | No | Federal | ECE Providers | | Long-term |
| | Source: Increasing Access to Inclusive Environments and COVID-19 Resources and FAQ's | | | | | |
| GA | Georgia Teacher/Provider Retention Program (GATPRP) TPRP is a model induction program for Georgia special education teachers designed to Increase innovation in teaching high-leverage practices (HLPs) using mixed-reality simulation labs. Increase coaching and immediate performance feedback for new special education teachers. Source: Georgia Teacher/Provider Retention Program (GA-TPRP) | No | | | | Long Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------------|-----------------------|--|------------------------------|
| IL | Early Childhood Access Consortium for Equity "Illinois created the consortium to help strengthen career pathways for the ECE workforce. The Consortium is an agreement between public universities, community colleges, and private institutions to cooperate through regional hubs to improve access to degrees and certificates, Gateways credentials, and other licensure endorsements." Source: US HHS, ACF, ECD, Examples of State and Local Early Childhood Workforce Strategies | No | State and Federal | ECE Providers | The entire initiative is focused on promoting equity | Long Term |
| IL | Illinois Gateways to Opportunity Early Childhood Education Credential Competency Project. Goals of the project include: "1) Transition from standards-based to competency-base educator preparation; 2) Create individual modules for each early childhood teacher competency; and 3) Individualize competencies into discrete modules to reduce barriers for students and provide a way for colleges and universities to provide individualized and student-centered approaches to showing competence on the early childhood competencies." Source: Quality & Workforce Committee | No | State and Federal | ECE Providers | This is part of the overall initiative aimed at supporting equity for the ECE workforce. | Long Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|--|--|--------------|------------------------------|
| IL | Early Intervention Training Program The Early Intervention Training Program at the University of Illinois provides training opportunities for early intervention professionals in Illinois. Our mission is to develop a system that is regionalized, responsive and reflective of best practice in the field of early intervention in Illinois while promoting growth, service, and belonging. Source: Early Intervention Training Program at the University of Illinois | | Illinois Departme nt of Human Services Bureau of Early Interventi on | El Personnel focus, but open to broader ECE workforce and parents | | Long Term |
| IL | Illinois STAR NET Illinois STAR NET envisions a future where early childhood professionals and families have the supports needed to provide all children with a high quality, equitable education in inclusive environments. STAR NET aims to promote evidence-based inclusive practices for young children with disabilities, professional development to support educators and families, and meaningful child outcomes through innovative and engaging learning experiences. Source: STAR NET | No | Illinois State Board of Educatio n | ECSE Personnel and parents | | Long-term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|---|----------------------------|-----------------------|-----------------------|--------------|------------------------------|
| KS | Kansas Inservice Training System (KITS) "KITS provides professional development through training activities and individualized technical assistance. Training and technical assistance is provided to all Kansas Part C providers through a model based on intensity of support. These levels of intensity reflect principles of both adult learning and results-based staff development and are addressed at the levels of Level 1-proactive/general issues staff development and TA, Level 2-focused staff development and TA, and Level 3-intensive staff development and TA." Source: Kansas Inservice Training System | No | | Part C providers | | Long Term |
| MN | Center for Inclusive Child Care (CICC) "CICC provides free relationship-based professional development. This includes support, modeling, and resources to child care programs throughout the state. Coaches spend time in programs, providing support focused on the successful inclusion of children with challenging behaviors or disabilities. Coaches also share information about implementing health and safety best practices and supporting the unique needs of infants and toddlers." Source: Center for Inclusive Child Care: Coaching | No | | ECE Providers | | Long Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------|-----------------------------|--------------|------------------------------|
| SC | The South Carolina Child Care Inclusion Collaborative (SCIC) SCIC provides individualized training and technical assistance to child care providers. This training and technical assistance helps providers support the inclusion of children with disabilities or developmental delays in child care programs. Inclusion specialists work directly with child care staff and program administrators to increase the use of evidence-based practices that lead to all children's meaningful participation. Through active collaboration with other agencies and organizations, SCIC helps child care providers stay connected with resources and opportunities, helping to increase the quality of care and education provided to children and families in South Carolina." Source: The South Carolina Child Care Inclusion Collaborative (SCIC) | No | | ECE EI/ECSE Providers | | Long Term |
| TX | CLI Engage "The University of Texas CLI Engage initiative is implementing a system for early childhood specialists to earn micro-credentials as part of an early childhood competency framework. The competencies involved in these micro-credentials have been identified as essential for all early childhood specialists, such as coaches, trainers, and assessors. CLI Engage identifies a cohesive set of skills for each role that candidates would need to demonstrate to earn these micro-credentials in the form of digital badges." Sources: Preparing Personnel: Micro-credentials and ECE Professional Micro-Credentials | No | State Funded | ECE Providers | | Long Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|---|----------------------------|-----------------------------|-------------------------------------|--------------|------------------------------|
| VA | Virginia Professional Development for SLPs "Professional development opportunities for SLPs to increase knowledge and skills. These offerings were developed by the Virginia Department of Education and may be used to satisfy continuing education requirements for Virginia SLPs and meet ASHA certification maintenance hour (CMH) requirements for those seeking to renew their ASHA CCC-SLP." Source: Virginia Department of Education: Speech Language Pathologists Professional Development | No | State and Federal | Speech- language Pathologists | | Long-term |
| VA | Virginia Early Intervention Professional Development Center (VEIPD) The VEIPD coordinates and oversees Virginia's Comprehensive System of Personnel Development (CSPD) for early interventionists who provide supports and services for infants and toddlers with developmental delays and disabilities and their families under Part C of the Individuals with Disabilities Act (IDEA). Source: Virginia Early Intervention Professional Development Center | No | | El Personnel | | Long-term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------------------|----------------------------------|--------------|------------------------------|
| WI | Leading Forward: Teacher Induction and Mentoring This mentoring program offers beginning teachers access to mentoring during their induction period, "teacher mentors are licensed educators who are trained to provide support and assistance to beginning teachers. They have input into the confidential, formative assessment of the teacher but are <u>not</u> considered a part of the formal evaluation process. Teacher Mentor training provides foundational qualifications to ensure mentors have the understanding, skills and abilities to provide support." Source: Leading Forward: Teacher Induction and Mentoring | No | State Dept of Educatio n | Beginning preK-12 teachers | | Long |

Supportive Workplace Environment Strategies

How early interventionists, early childhood special educators, and related service providers perceive their working environment and how leaders within the environment demonstrate stated EI/ECSE values in policies and procedures contributes to how an employee feels about work and their decision to stay or leave. Administrative support and communication, individual decision-making, influence over policy and practices, meaningful professional development, and collaboration with colleagues are some of the most important factors (Burkhauser, 2017; Dixon et al., 2019; Scott & Alexander, 2019). In addition, support from school and program leaders that focuses on individuals' professional and emotional needs is related to reduced turnover if these administrators create policies and practices tailored to their staff's most essential needs (Carver-Thomas, 2018; Grant, 2017).

Working Conditions

A large body of research provides evidence that workplace climate and leadership have a significant impact on staff turnover, with working conditions having some of the strongest influences on staff retention. Research suggests that working conditions for early childhood educators, including those who support children with disabilities in inclusive classrooms, are challenging at best (Kwon, Ford, Salvatore, Randall, Jeon, Malek-Lasater, Ellis, Kile, Horm, Kim, & Han, 2022). According to Kwon et al., (2022) early childhood educators experience physical issues (ergonomic pain and headaches), psychological issues (depressive symptomatology) and an inverse relationship between education level and well-being (with bachelor's degree level teachers demonstrating less well-being than teachers without degrees). Kwon et al. found that elements of the workplace such as time and space for breaks during the day or a space to store personal belongings were limited (2022, p. 162).

For early interventionists, early childhood special educators, and related service providers, an important factor in working conditions is whether they feel that they have the capacity to effectively meet children's needs. Working conditions for these professionals include the demands of paperwork, caseloads, instructional responsibilities, the extra responsibilities they're assigned associated with regulatory requirements and finding or adapting the resources that they need (Bettini et al., 2019; Dixon et al., 2019). Research has shown that speech-language pathologists rank workload and caseload among the primary reasons for dissatisfaction with their work in public school settings (Edgar& Rosa-Lugo, 2007; Kalkhoff & Collins, 2012). Resources such as administrative and collegial support and workplace culture, as well as logistical resources such as time and materials are critical to supporting these types of responsibilities (Bettini et al., 2019; Edgar and Rosa-Lugo, 2007). According to Grant (2017), roughly nine percent of special educators in classrooms left the profession after their first year, citing themes such as lack of administrative support, excessive paperwork and burnout as primary factors that prompted their decision to leave. Further analysis of the research produced additional themes, including poor co-teaching relationships, the use of ineffective co-teaching models, child behavior, time management, paperwork, isolationism, time management, and ambiguous special education practices and procedures.

Administrator Support for Staff Wellness

Support from administrators that focuses on individuals' professional and emotional needs is related to reduced turnover. Teaching has long been considered a stressful position, with educators making, on average, four instructional decisions each minute, or around 1,300 decisions per day (Koch, 2018). In 2021-2022, educators indicated they experienced more stress than ever. In a survey of its members, The National Education Association (NEA) found that fifty-five percent indicated they are thinking of leaving the profession earlier than they had planned (Walker, 2022). COVID-19 exacerbated mounting dissatisfaction among educators with compensation, community and family support, inadequate resources, increasing workloads and added concerns about physical, mental, and emotional health (Marante, Mills & Farquharson, 2023; Walker, 2022).

These stressors can lead to burnout, a significant factor in provider turnover. Burnout occurs when job-related stress negatively impacts professionals' physical, mental, and emotional health (Grant, 2017). Burnout can result from experiencing multiple stressors such as increased paperwork demands, serving children with high support needs (particularly in relation to persistent challenging behaviors), and perceived lack of support from administrators and families of children that they serve (Grant, 2017; Marante, Mills & Farquharson, 2023). El/ECSE providers report being overwhelmed that federal, state, and local requirement like ongoing formative assessment, progress monitoring, data collection and record-keeping related to implementing Individualized Family Service Plans (IFSP) or Individualized Education Programs (IEPs) eclipse their ability to effectively design high-quality learning environments, plan for intentional interactions with children in their care, and use other high leverage practices in their work with young children (Marante, Mills & Farquharson, 2023).

Preventing burnout is critical to maintaining, sustaining, and retaining El/ECSE personnel and is directly related to the direct supervisor or administrator in the school or site itself. For teachers in particular, administrators have the single largest impact on retention (Barth et al., 2016). For speech-language pathologists, research has shown that relationships with administrators and a lack of administrator support are one of the most significant barriers to achieving a manageable caseload (ASHA, 2022). To prevent burnout, administrators can provide increased access to resources (including coaches, specialists, counselors, mental health providers, curriculum specialists, etc.) to combat burnout and reduce the turnover that results. Administrators who support staff by prioritizing their professional needs including reasonable workloads and supports for self-care and wellness are key to promoting a supportive workplace environment. Administrators who support and prioritize staff needs and wellness, make time and space for peer-to-peer collaboration, coaching and mentoring as well as physical, emotional, or creativity breaks throughout the day to encourage staff self-care. Prioritizing and promoting these types of staff-centered activities can decrease providers' stress and increase their perceptions of working conditions.

Spotlight on Increasing El/ECSE Workforce Diversity

In their study of why teachers of color leave the workforce, Dixon et al. (2019) found that factors related to work environment where critical in their decisions to leave. These included things like lack of support for their professional growth, taking on more than their share of the work but receiving no additional compensation, and the financial and psychological impact of being a teacher of color (Dixon et al., 2019, p.2). These findings have important implications for administrators and directors who influence working conditions and settings. Finding ways to compensate teachers of color for their extra work, prioritizing the hiring of teachers of color to reduce isolation, and ensuring an inclusive and respectful work environment are key to addressing turnover for teachers of color (Dixon et al., 2019, p.3). Similarly, a study of Mexican American special education teachers found that a work environment that

replicated a sense of family (collegiality, supportive relationships with colleagues, etc.) influenced their decision to stay with the school (Lopez-Estrada & Koyoma, 2007). Making sure the EI/ECSE workforce represents the children and families served in schools and programs requires prioritizing this goal and providing supports to higher education and other programs that support the preparation of EI/ECSE personnel. One example of this is the Allied Health Workforce Diversity Act (H.R. 3320/S. 1679) which created the Allied Health Workforce Diversity program. This program awards grants to accredited higher education programs that prepare health professionals (e.g. occupational therapists, speechlanguage pathologists, physical therapists). These funds are intended to create a pathway for individuals who are currently underrepresented in the Health profession (Saffer, 2023).

State and Local examples of **Supportive Workplace Environment** strategies are included in **Table 5**.

Table 5. Supportive Workplace Environment Strategies

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------------|-----------------------|--|------------------------------------|
| AK | The Aleutian Pribilof Islands Association (APIA) "This Tribal CCDF grantee that consolidates their CCDF funds into a Public Law 102-477 integrated employment, training, and related services plan, invested American Rescue Plan (ARP) funds into holistic self-care and wellness initiatives to support staff. This includes contracting with an Indigenous yoga instructor to offer online yoga classes twice a week for all staff that weaved together traditional knowledge and Western approaches. In addition to yoga, APIA worked with the Center for Mind-Body Medicine to offer an 8-week culturally grounded evidence-based group class for staff. The classes focused on meditation, movement, breathwork, journaling, and drawing, and incorporated traditional music and other cultural adaptations. The groups were found to reduce anxiety, depression, and post-traumatic distress symptoms and improve coping skills, immune functioning, relationships, and connection to culture and traditional practices." Source: US HHS, ACF, ECD, Examples of State and Local Early Childhood Workforce Strategies | Yes | Federal CCDF | AIAN ECE Providers | Threading indigenous music, traditions and practices into staff wellness | Short-terr |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------------|----------------------------|--------------|------------------------------------|
| AR | Telehealth Access for Mental Health Support "Arkansas will soon begin using PDG B-5 funds to offer a range of mental-health related supports for the ECE workforce. They will help ECE providers access mental health treatment services through partnering with AR ConnectNow, a comprehensive, telehealth- based behavioral health treatment program developed during the pandemic. The state will also offer support and stress management skill-building groups and assistance accessing treatment and other services." Sources: US HHS, ACF, ECD, Examples of State and Local Early Childhood Workforce Strategies and Project PLAY: Partnering with early childhood professionals to promote social-emotional health of Arkansas' children | No | Federal PDG Grant | ECE Providers | | Long-term |
| IL | Illinois Service Coordinator Forum "The Illinois Service Coordination Forum is a place for service coordinators currently working in the Illinois Early Intervention System (and those who support/lead them) to partner and support each other in the very important work that they do." Source: Illinois Service Coordination Communities of Practice (CoPs) | No | State | El Service Coordinators | | Long Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------------|-----------------------|--------------|------------------------------|
| NC | East Coast Migrant Head Start Program Wellness Activities "Wellness activity days for whole centers — activities were selected by center teams and could include art therapy, mindfulness walks, yoga or Zumba, and other group activities. Teams selected activities that all staff would be comfortable with, many facilitated by mental health consultants. Mental Health consultant facilitated group meetings with full center staff or smaller teams to discuss and process the experiences of the past season. Referrals were made for those who needed more support. Two additional paid days off for center directors. Center Directors were on the front lines supporting staff and families and were making many difficult decisions. They needed some time away. Respite week to ensure the health and safety of children and to provide care for staff. Centers closed for one week of paid time off, and staff were urged to take time to rest, care for themselves, and care for their family members. The difficult decision to close was made in consultation with parents, who strongly supported the need for staff to get some rest. Crisis support — When tragedies impacted centers, local teams worked collaboratively to develop individualized crisis plans. Teams could select from a menu of online or in-person supports, and included resources provided by insurance providers, the employee assistance program, mental health consultants, and local supports." Source: US HHS, ACF, ECD, Examples of State and Local Early Childhood Workforce Strategies | Yes | | ECE Providers | | Short-term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|--|-----------------------|--------------|------------------------------------|
| NE | Cultivating Healthy Intentional Mindful Educators (CHIME) "CHIME provides ECE staff with a series of 1.5-hour sessions led by a trained guiding teacher who facilitates activities such as journaling, reflective practice, meditation, and mindfulness exercises to support themselves, as well as the children in their care. Implementation of CHIME is supported by a team from the University of Nebraska—Lincoln. A pilot randomized controlled trial of the program showed that participation in CHIME reduced stress and difficulties in emotional regulation and increased self-compassion, mental well-being, and feeling of efficacy and general healthiness." Source: US HHS, ACF, ECD, Examples of State and Local Early Childhood Workforce Strategies | No | Federal PDG Grant and University of Nebraska Extension | ECE Providers | | Short-term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------------|-----------------------|--------------|------------------------------|
| NY | Mental Health Supports "PAL Early Head Start/Head Start program in New York City hired their own mental health manager to provide more dedicated time to staff, families, and children across the program's eight sites. The manager visits each center regularly and provide individual and group consultations with staff. The manager also created a staff wellness team with representatives from each site, as well as parents from the community. The team develops a staff wellness plan and meets monthly to monitor how it is going and discuss issues that need to be addressed. They also survey the staff regularly. Some actions to promote ECE staff's mental health include training and resources (e.g., apps) for self-care; creating more inviting and comfortable spaces with rugs, air purifiers, and music; and professional development on trauma-informed practice and Conscious Discipline." Source: US HHS, ACF, ECD, Examples of State and Local Early Childhood Workforce Strategies | Yes | | ECE Providers | | Short-term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|---|----------------------------|-----------------------------|-----------------------|--------------|------------------------------------|
| OH | Mental Health Supports "Knox County Head Start, located in Mount Vernon, Ohio, provides mental health support to staff through a partnership with mental health professionals who are available to staff every Wednesday to provide free counseling sessions, both virtually and in- personThe program also hosts events that support positive physical health, such as wellness bingo and meditation challenges. Additionally, they purchased the Head Space mindfulness and meditation app for employees and have been intentionally incorporating its techniques into daily practices, such as starting staff meetings with meditation exercises. In the Fall, they held a surprise staff appreciation day where leadership delivered coffee and donuts to all the centers. And in the Spring, they hosted a mental health day which gave employees the chance to take part in activities such as yoga, painting or a meditative labyrinth walk." Source: US HHS, ACF, ECD, Examples of State and | Yes | | ECE Providers | | Short-term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|---|----------------------------|--|-----------------------|--------------|------------------------------|
| OK | Tulsa Public Schools: Supporting Better Professional Learning "Tulsa Public Schools redesigned how the central office supported principals—including providing intensive training and tools for a pilot group of principals to help them revamp roles, teacher teaming, and school schedulesAt the end of the first year of implementation, all pilot schools have increased teachers' collaborative planning time by at least 50 additional minutes per week and have new teacher leadership roles to facilitate this time." Source: Tulsa Public Schools: Redesigning Schools for Professional Learning—On a Budget: How Tulsa Public Schools Helped Principals to Support Better Professional Learning | No | State funding; Supports from ERS to develop this initiative was funded by philanthro py | | | |
| UT | Mental Health Services "Utah's Office of Child Care in the Department of Workforce Services (DWS) has dedicated approximately \$1 million of COVID relief funds to connect ECE staff directly to mental health services in response to increased demand from teachers and providers. DWS contracted and collaborated with the Office of Substance Use and Mental Health in the state's Department of Health and Human Services to create a referral service that is open to all staff in licensed or regulated programs, including licensed family child care and DWS-approved Family, Friend, and Neighbor providers." Source: US HHS, ACF, ECD, Examples of State and Local Early Childhood Workforce Strategies | Yes | | ECE Providers | | Short-term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------------|-----------------------|--------------|------------------------------|
| WA | Trauma-Informed Care "Benton Franklin Head Start in Richland, Washington, has emphasized staff wellness by implementing trauma-informed care techniques. The program contracted with a local team of psychologists to put together a training day, as well as six follow-up meetings throughout the year for staff. Additionally, they have provided staff with education books on dealing with and healing from trauma as well as journaling supplies to support staff wellness and mental health." Source: US HHS, ACF, ECD, Examples of State and Local Early Childhood Workforce Strategies | Yes | | ECE Providers | | Short-term |

Leadership and Advancement Opportunities

The National Board for Professional Teaching Standards affirms that leadership is an essential part of the role of the teacher. Leadership opportunities should begin during a novice teacher's induction experiences because it is a component of teacher evaluation instruments. While educators remain in positions in which there are opportunities for leadership, teacher leadership cannot come at the expense of the educator's primary responsibility, which is teaching young children and supporting their families. According to The Center for Comprehensive School Reform and Improvement (2005) Teacher leadership is the process by which teachers, individually or collectively, influence their colleagues, principals, and other members of the school communities to improve teaching and learning practices with the aim of increased student learning and achievement. Such team leadership work involves three intentional development foci: individual development, collaboration or team development, and organizational development. (pp. 287.288) In their review of research literature on early childhood education leadership, Kirby et al. found that while the concept of teacher leadership is not well studied, there is emerging empirical evidence that the combination of two types of early childhood teacher leadership, those focused on improving the instructional quality in a program (e.g. peer coaching or mentor teachers) and leadership focused on promoting collaborative learning among teaching staff (leading a community of practice or other group professional development) can improve the overall quality of an early childhood center (2021, p. 27).

Since experienced teachers often leave positions due to a lack of leadership opportunities, providing opportunities may prevent educator attrition. When educators can provide input to strengthen practices with other teachers, they feel connected and can provide support for changes that strengthen teaching and learning. According to the Association for Supervision and Curriculum Development, "many of the reasons for leaving teaching, such as isolation, stress, and lack of opportunities, cannot coexist in schools where the community expects, develops, and recognizes teacher leadership from the start" (Association for Supervision and Curricular Development, 2019).

Opportunities for leadership are critical in retaining EI/ECSE personnel beyond the special education teacher. For example, collaborating with school and district leadership to design and implement programming is a critical role for speech-language pathologists (ASHA, 2010). Other roles such as serving as an IEP team lead, mentoring newly hired occupational or physical therapists (beyond the clinical or health care setting), and helping to design intervention approaches in school settings (e.g., ensuring service delivery in the least restrictive school environment) can help these EI/ECSE personnel have input in their work environment, influence student experiences and outcomes, help school-based staff to understand their role and discipline, and act as a meaningful member of the team are all ways that leadership contributes to retaining these key EC/ECSE personnel (Edgar & Rosa-Lugo, 2007; Kalkhoff & Collins, 2012; Ford et al., 2021).

Spotlight on Increasing El/ECSE Workforce Diversity

Opportunities for leadership and advancement are an important element of retention for teachers of color. Advancement opportunities such as financial incentives to reward graduate degrees that open up opportunities for Black male advancement is a key factor in recruitment and retention of Black male teachers because it demonstrates a commitment to racially diverse leadership and promotes networking opportunities among this group (Dixon et al.2019; Scott & Alexander). Equally important, leadership opportunities offer teachers of color an opportunity to lead efforts to ensure culturally responsive and meaningful curriculum by tailoring the curriculum to their student population (Dixon et al., 2019, p.2). Dixon et al., 2019 suggest that leaders who want to retain teachers of color need to

demonstrate an investment in them by creating pathways to leadership, opportunities for mentorship, and the freedom to tailor curriculum to the students in their classrooms (p.3).

Examples of state and program efforts to promote **Leadership and Advancement** for EI/ECSE personnel are included in **Table 6**.

Table 6. State and Local Examples of Leadership and Advancement Strategies

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|---|----------------------------|--|-----------------------|--|------------------------------|
| CA | The California Early Childhood Mentor Program Mentoring focused on developing leadership and offering guidance to students preparing to enter the ECE profession and current child care teachers or directors, Source: US HHS, ACF, ECD, Examples of State and Local Early Childhood Workforce Strategies and The California Early Childhood Mentor Program | No | California Departme nt of Social Service | ECE Providers | A program goal is to diversify the ECE workforce | Long Term |
| KY | Scholarship for Leaders Scholarship program for child care directors who work a minimum of 20 hours per week to complete a master's degree in ECE of ECSE at any KY state university. Source: US HHS, ACF, ECD, Examples of State and Local Early Childhood Workforce Strategies | Yes | | ECE Providers | | |
| ОН | Ohio Early Childhood Inclusive Leadership Fellowship A 2-year fellowship designed to "increase the capacity of leaders to improve systems serving children with disabilities." Source: Ohio Early Childhood Inclusive Leadership Fellowship | No | UD DOE Grant | ECE Leadership | | |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|--|------------------------------------|--|------------------------------|
| PA | The OCDEL Policy Fellowship The Office of Child Development and Early Learning (OCDEL) offers a fellowship to enhance career pathways for early learning providers and professionals. The fellowship includes placement sites, monthly cohort meetings, and an online learning community. Source: Pennsylvania OCDEL Policy Fellowship | No | Foundati on | Early learning professionals | | Long Term |
| RI | Blackstone Valley Prep (BVP), Public Charter Network "fellowship for current BVP teachers to train for school leadership positions (as grade-level chairs, Deans, or principals), with three candidates (all teachers of color) currently preparing for leadership roles, with a commitment to hire successful fellowship graduates when leadership roles become available." Source: Seven strategies school districts are using to increase teacher diversity | No | General funds/loc al school funding | K-12 teachers | | Long Term |
| IL | Lead with Chicago Public Schools (CPS) Lead with CPS is a "leadership pathways for teachers (e.g., as mentor teachers, department chairs, and team leads) to refine the recruitment and selection process 'to limit or mitigate bias by training and setting standards and guidelines for diverse candidate pools and selection criteria." Source: Seven strategies school districts are using to increase teacher diversity | No | State | Prek-12 teachers | The mission is to increase diversity and promote equity in CPS | Long Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|-----------------------------|---|--------------|------------------------------|
| IL | Early Intervention Training Program (EITP) Leadership Fellowship The Leadership Fellowship is designed to support Early Intervention leaders to grow in their capacity to meet the needs of the early intervention workforce and families. The intent of the fellowship is to learn how to manage the cycle of stress and renewal and maintain powerful and positive relationships to create a culture in which people feel a sense of belonging and can be at their best. The fellowship provides a professional development opportunity aimed at increasing emotional intelligence and strengthening leadership skills, increasing capacity to leverage strengths and opportunities to achieve goals, strengthening relationships to sustain quality early intervention work and establishing social networks to draw upon and connect with after the fellowship is completed. Source: Systems of Support for Service Coordinators | No | State | El Personnel | | Long Term |
| VA | Aspiring Special Education Leaders Academy "The Academy is a program established to assist school divisions and state-operated programs with succession planning and is designed to help prepare potential leaders for future administrative positions in special education." Source: Virginia Department of Education: Leadership Academies | No | State and Federal | School division or state- operated program personnel | | Long Term |

| State | Example | ARP or CARES funding | Other funding sources | Eligible personnel | Equity focus | Short- or long-term solution |
|-------|--|----------------------------|--|--|--------------|------------------------------|
| VA | Leadership in Effective And Developmentally-appropriate Services (LEADS) "designed to create and support a network of statewide leaders responsible for administrative oversight of local ECSE programs." Source: Leadership in Effective And Developmentally-appropriate Services (LEADS) | No | State and Federal | Statewide leaders with oversight of local ECSE programs. | | Long Term |
| MD | Maryland Early Childhood Leadership Program (MECLP) University of Maryland Baltimore County program with the goal of "accelerating cross-sector leadership in early childhood." Source: Maryland Early Childhood Leadership Program (MECLP) | No | Maryland State DOE The Trust for Learning Individual s | ECE, ECSE, and EI practitioners | | Long Term |
| LA | Special Education Leader Fellowship (SELF) "a 2-year cohort-based program designed to improve educational programming for students with exceptionalities." The fellowship is for "current and aspiring special education leaders." Source: Special Education Leader Fellowship (SELF) | No | Philanthr opy | ECSE Personnel | | Long Term |

References

- 1. Acosta, K.A., & Holdheide, L.R. (2021). *An opportunity to invest in the educator workforce. Center on Great Teachers and Leaders*. https://ceedar.education.ufl.edu/wp-content/uploads/2022/01/An-Opportunity-to-Invest-in-the-Educator-Workforce.pdf
- 2. American Speech-Language-Hearing Association (2023). *ASHA 2023 SLP Health Care Survey: Annual Salary Report*. https://www.asha.org/siteassets/surveys/2023-slp-hc-survey-annual-salaries.pdf
- 3. American Speech-Language-Hearing Association (2022). ASHA 2022 Schools Survey: Annual Salaries and Hourly Wages Report. https://www.asha.org/siteassets/surveys/2022-schools-slp-salaries.pdf
- 4. American Speech-Language-Hearing Association (2024). Challenges to Successful Recruitment and Retention of School-Based SLPs [Webpage]. https://www.asha.org/Careers/recruitment/schools/Challenges
- American Speech-Language-Hearing Association. (2010). Roles and responsibilities of speechlanguage pathologists in schools [Professional issues statement]. https://www.asha.org/policy/pi2010-00317
- 6. Association for Supervision and Curricular Development. (2019). *New Educators Want Opportunities for Leadership, Too*. https://www.ascd.org/el/articles/new-educators-want-opportunities-for-teacher-leadership-too
- 7. Barth, P., Dillon, N., Hull, J., & Holland Higgins, B. (2016). Fixing the holes in the teacher pipeline: An overview of teacher shortages [White paper]. Center for Public Education. https://eric.ed.gov/?id=ED608871
- 8. Bettini, E., Phillips, A., Candelaria, M., Kennedy, M., Edmonds, R.Z., & Scott, T. (2019). Retaining effective personnel to serve children with disabilities [Symposium session]. 2019 OSEP Virtual Symposia Series, Washington, DC. U.S Department of Education, Office of Special Education Programs. https://osepideasthatwork.org/osep-meeting/retaining-effective-personnel-serve-children-disabilities-may-2019
- 9. Billingsley, B., & Bettini, E. (2019). Special education teacher attrition and retention: A review of the literature. *Review of Educational Research*, 89(5), 697–744. https://doi.org/10.3102/0034654319862495
- Bruder, M.B., Catalino, T., Chiarello, L.A., Mitchell, M., Deppe, J., Gundler, D., Kemp, P., LeMoine, S., Long, T. Muhlenhaupt, M., Prelock, P., Schefkind, S., Stayton, V., & Ziegler, D. (2019). Finding a common lens: Competencies across professional disciplines providing early childhood intervention. *Infants & Young Children 32*(4), 280–293. https://doi.org/10.1097/IYC.000000000000000153
- 11. Burkhauser, S. (2017). How much do school principals matter when it comes to teacher working conditions?. *Educational Evaluation and Policy Analysis*, 39(1), 126–145. https://doi.org/10.3102/0162373716668028
- Carver-Thomas, D. (2018). Diversifying the teaching profession: How to recruit and retain teachers of color. Palo Alto, CA: Learning Policy Institute. https://learningpolicyinstitute.org/sites/default/files/product-files/Diversifying_Teaching_Profession_REPORT_0.pdf

- 13. Center for Comprehensive School Reform and Improvement (2005). What does the research tell us about Teacher Leadership? [Research brief]. Washington, DC. http://www.centerforcsri.org/files/Center_RB_sept05.pdf
- 14. Center for the Study of Child Care Employment, (2020). *Early Childhood Workforce Index 2020*. University of California at Berkeley. https://cscce.berkeley.edu/workforce-index-2020
- 15. Croft, A., Coggshall, J.G., Dolan, M., Powers, E., & Killion, J. (2010). *Job-Embedded Professional Development: What It Is, Who Is Responsible, and How to Get It Done Well* [Issue brief]. National Comprehensive Center for Teacher Quality. https://learningforward.org/wp-content/uploads/2017/08/job-embedded-professional-development.pdf
- Darling-Hammond, L. (2010). The flat world and education: How America's commitment to equity will determine its future. NY: Teachers College Press. https://doi.org/10.1007/s10833-010-9137-7
- 17. Dennis, L.R., Farquharson, K., Reed, A.C., Summy, R., Clark, K.G., & Westmoreland, J. (2023). Practice-Based Coaching for Speech-Language Pathologists Supporting Paraeducators and Speech-Language Pathology Assistants. *Language, Speech & Hearing Services in Schools*, 54(1), 160–170. https://doi.org/10.1044/2022_LSHSS-22-00068
- 18. Dixon, D., Griffin, A., & Teoh, M. (2019). *If you listen, we will stay: Why teachers of color leave and how to disrupt teacher turnover.* The Education Trust and Teach Plus, Washington DC. https://teachplus.org/disruptteacherturnover
- 19. Donaldson, D., Barron, L., & Jackson, B. (2022). Establishing a pipeline of future special educators: Using Grow Your Own to recruit high school students, career changers, and paraprofessionals [Webinar]. Council for Exceptional Children and CEEDAR Center. https://exceptionalchildren.org/events/information-implementation-combatting-shortages-educators-serving-swds/establishing-pipeline-future-special-educators-using-grow-your-own-programs-recruit-high
- 20. Eberly, J. E. (2018). Community college developmental education services: Perspectives of Spanish-speaking Latino early childhood educators. *Journal of Hispanic Higher Education*, 17(1), 3–19. https://doi.org/10.1177/1538192716652500
- 21. Edgar, D.L., & Rosa-Lugo, L.I. (2007). The critical shortage of speech-language pathologists in the public school setting: Features of the work environment that affect recruitment and retention. *Language, Speech, and Hearing Services in Schools 38*(1), 31-46. https://doi.org/10.1044/0161-1461(2007/004)
- 22. Farquharson, K., Therrien, M., Barton-Hulsey, A., & Brandt, A. F. (2022). How to Recruit, Support, and Retain Speech-Language Pathologists in Public Schools. *Journal of School Leadership*, 32(3), 225–245. https://doi.org/10.1177/1052684620966062
- 23. Ford, A.R., Smith, D.L., & Banister, G.E. (2021). Recruitment and retention of occupational therapy practitioners and students of color: A qualitative study. *American Journal of Occupational Therapy*, 75(1), 7501205150p.1–7501205150p.8. https://doi.org/10.5014/ajot.2020.039446
- 24. Gardner, M., Melnick, H., Meloy, B., & Barajas, J. (2019). *Promising models for preparing a diverse, high-quality early childhood workforce* [Report]. Palo Alto, CA: Learning Policy Institute. https://learningpolicyinstitute.org/sites/default/files/product-files/Early_Educator_Preparation_REPORT.pdf
- 25. Gallup. (2017). State of the American workplace [Report]. https://www.gallup.com/workplace/238085/state-american-workplace-report-2017.aspx

- 26. Gilmour, A.F., & Wehby, J. H. (2020). The association between teaching students with disabilities and teacher turnover. *Journal of Educational Psychology*, 112(5). https://doi.org/10.1037/edu0000394
- 27. Goldhaber, D., Strunk, K.O., Brown, N., Chambers, A., Naito, N., Wolff, M. (2018). Teacher staffing challenges in California: Exploring the factors that influence teacher staffing and distribution [Technical report]. Policy Analysis for California Education. https://eric.ed.gov/?id=ED594738
- 28. Grant, M.C. (2017). A Case Study of Factors that Influenced the Attrition or Retention of Two First-Year Special Education Teachers. *Journal of the American Academy of Special Education Professionals*, Winter 2017. https://eric.ed.gov/?id=EJ1129641
- 29. Harvison, N. (2023). *Academic Leadership Councils presentation*. American Occupational Therapy Association. https://www.aota.org/-/media/corporate/files/educationcareers/alc-2023/higher-education-challenges.pdf
- 30. IDEA Infant and Toddler Coordinators Association (2022). 2022 Tipping Points Survey. https://www.ideainfanttoddler.org/pdf/2022-Tipping-Points-Survey.pdf
- 31. Kalkhoff, N.L. & Collins, D.R. (2012) Speech-language pathologist job satisfaction in school versus medical settings. *Language, Speech, and Hearing Services in Schools, 43*(2), 164–175.https://doi.org/10.1044/0161-1461(2011/11-0007)
- 32. Kaniuka, T. (2020). Effects of Administrator Evaluation Policy on Teacher Working Conditions and Turnover Regression. *Journal of Educational Leadership and Policy Studies, 4*(1). https://eric.ed.gov/?id=EJ1282672
- 33. Kirby, G., Douglass, A., Lyskawa, Jones, C., & Malone, L. (2021). *Understanding Leadership in Early Care and Education: A Literature Review* [Report]. OPRE Report 2021–02. Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. https://www.acf.hhs.gov/opre/report/understanding-leadership-early-care-and-education-literature-review
- 34. Koch, J. (2018). State mentoring policies key to supporting novice teachers. *National Association of State Boards of Education Policy Update*, *25*(1). https://www.nasbe.org/state-mentoring-policies-key-to-supporting-novice-teachers
- 35. Kucskar, M., Buchter, J., Oh-Young, C., & Weglarz-Ward, J. (2017). Early childhood education personnel pipeline and retention in Nevada. *Policy Issues in Nevada Education*, 2 1–12. https://digitalscholarship.unlv.edu/co_educ_policy/3/
- 36. Kwon, K.A., Ford, T.G., Salvatore, A.L., Randall, K., Jeon, L., Malek-Lasater, A., Ellis, N., Kile, M.S., Horm, D.M., Kim, S.G., & Han, M. (2022). Neglected elements of a high-quality early childhood workforce: Whole teacher well-being and working conditions. *Early Childhood Education Journal*, 50, 157–168. https://doi.org/10.1007/s10643-020-01124-7
- 37. Lloyd, C.M., Carlson, J., Barnett, H., Shaw, S., & Logan, D. (2021). Mary Pauper: A historical exploration of early care and education compensation, policy, and solutions. *Child Trends*. https://earlyedcollaborative.org/what-we-do/mary-pauper/
- 38. Lopez-Estrada, V., & Koyama, M. (2010). Retaining Mexican American special education teachers in Texas. *Journal of Hispanic Higher Education* 9(1), 82–97. https://doi.org/10.1177/1538192709357032

- 39. Marante, L., Hall-Mills, S., & Farquharson, K. (2023). School-based speech-language pathologists' stress and burnout: A cross-sectional survey at the height of the COVID-19 Pandemic. *Language*, *Speech*, *and Hearing Services in Schools*, (54)2, 456–471. https://doi.org/10.1044/2022_lshss-22-00047
- 40. McLean, C., Austin, L.J.E., Whitebook, M., & Olson, K.L. (2021). *Early Childhood Workforce Index*—2020. Center for the Study of Child Care Employment, University of California, Berkeley. https://cscce.berkeley.edu/workforce-index-2020/report-pdf
- 42. North Carolina Department of Public Instruction. (n.d.) *Beginning Teacher Orientation*. https://sites.google.com/dpi.nc.gov/ncref/nc-beginning-teacher-orientation
- 43. North Carolina State Board of Education. (2020). *Policy TCED-16: Beginning teacher support program*. https://simbli.eboardsolutions.com/Policy/ViewPolicy.aspx?S=10399&revid=yMslsh0oCzF1JmHZsnMn9Q2zw%3d%3d
- 44. Ondrasek, N., Carver-Thomas, D., Scott, C., & Darling-Hammond, L. (2020). *California's special education teacher shortage*[Policy brief.] Stanford, CA: Policy Analysis for California Education. https://edpolicyinca.org/publications/californias-special-education-teacher-shortage
- 45. Redding, C., & Henry, G.T. (2019). Leaving school early: An examination of novice teachers' within- and end-of-year turnover. *American Educational Research Journal*, *56*(1), 204–236. https://doi.org/10.3102/0002831218790542
- 46. Redding, C., & Henry, G.T. (2018). New evidence on the frequency of teacher turnover: Accounting for within-year turnover. *Educational Researcher*, *47*(9), 577–593. https://doi.org/10.3102/0013189X18814450
- 47. Saffer, A. (2023). *End of year legislation creates new allied health workforce diversity program*. American Occupational Therapy Association. https://www.aota.org/advocacy/advocacy-news/2022/end-of-year-legislation-creates-allied-health-workforce-diversity-program
- 48. Scott, L.A. & Alexander, Q. (2019). Strategies for recruiting and retaining Black male special education teachers. *Remedial and Special Education*, 40(4), 236–247. https://doi.org/10.1177/0741932517732636
- 49. Sherratt, E., Duncombe, C., Maxey, A., & Moseman, A. (2022). *Increased Compensation: State and District Efforts to Stabilize and Strengthen the Educator Workforce* [Webinar]. Council for Exceptional Children and CEEDAR Center. https://exceptionalchildren.org/events/information-implementation-combatting-shortages-educators-serving-swds
- 50. Sheridan, S.M., Edwards, C.P., Marvin, C.A., & Knoche, L.L. (2009). Professional development in early childhood programs: Process issues and research needs. *Early Education and Development*, 20(3), 377–401. https://doi.org/10.1080/10409280802582795
- 51. State of Washington Professional Educator Standards Board. (2016). *Grow your own teachers:* Enhancing educator pathways to address teacher shortage and increase diversity [Report]. https://www.pesb.wa.gov/resources-and-reports/reports/grow-your-own-teachers-report
- 52. Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). *A Coming Crisis in Teaching? Teacher Supply, Demand, and Shortages in the U.S.* Learning Policy Institute. https://doi.org/10.54300/247.242

- 53. Texas Comprehensive Center (2018). *Grow your own teachers initiatives resources*. Austin, TX: American Institutes for Research. https://eric.ed.gov/?id=ED594981
- 54. United States Bureau of Labor Statistics. (2022). *Occupational Outlook Handbook*. https://www.bls.gov/ooh/personal-care-and-service/childcare-workers.htm
- 55. United States Department of Education. (2021). *IDEA Part B child count and educational environments collection 2020–2021*, (accessed July 7, 2021 from file specifications 002 and 089) [IDEA Section 618 data]. https://data.ed.gov/dataset/idea-section-618-state-part-b-child-count-and-educational-environments/resources
- 56. United States Department of Education (2021). *Dear Colleague Letter on Labor Shortages in K–12 Education*. https://oese.ed.gov/files/2021/12/21-0414.DCL_Labor-Shortages.pdf
- 57. United States Department of Education, Office of Special Education Programs. (n.d.) Leverage points to enhance state and local efforts to attract, prepare, and retain effective personnel for children with disabilities. https://osepideasthatwork.org/attract-prepare-retain-effective-personnel-all
- 58. United States Department of Health and Human Services. (2021). Dear Colleague Letter on ECE Workforce. https://www.acf.hhs.gov/sites/default/files/documents/ecd/Dear%20Colleague%20Letter_ECE%20Workforce.pdf
- 59. Walker, T. (2022). Beyond burnout: What must be done to tackle the educator shortage. *NEA Today*. https://www.nea.org/advocating-for-change/new-from-nea/beyond-burnout-what-must-be-done-tackle-educator-shortage
- 60. Wiggan, G., Smith, D., & Watson-Vandiver, M. (2021). The national teacher shortage, urban education and the cognitive sociology of labor. *The Urban Review, 53*, 43–75. https://doi.org/10.1007/s11256-020-00565-z
- 61. Zhang, G., & Zeller, N. (2016). A longitudinal investigation of the relationship between teacher preparation and teacher retention. *Teacher Education Quarterly*, Spring 2016. https://eric.ed.gov/?id=EJ1100322