Personnel: The most important variable in Early Childhood Intervention

Office of Special Education Programs
February 14, 2024
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What We Know and...... What We Need to Know

- The Center for Early Childhood Policy and Practice (2003-2008)
- Early Childhood Personnel Center (2013-2023)



QUALIFIED PERSONNEL IDENTIFIED IN IDEA

Part C (ages 0-3)

- Special Educators;
- Speech-Language Pathologists and Audiologists;
- Occupational Therapists;
- Physical Therapists;
- Psychologists;
- Social Workers;
- Nurses;
- Nutritionists;
- Family Therapists;
- Orientation and Mobility Specialists; and
- Pediatricians and other Physicians;

Part B (ages 3-5)

- Special Education;
- General Education;
- Related Service Personnel:
 - Speech-Language Pathologists and Audiologists;
 - Occupational Therapists;
 - Psychologists;
 - Physical Therapists;
 - Recreational Therapists;
 - Social Workers;
 - Counseling services;
 - Orientation and Mobility Specialists, and
 - Pediatricians and other Physicians, except that such medical services shall be for diagnostic and evaluation purposes only



Has Anything Changed?

- Bricker, D. D., Bruder, M. B., & Bailey, E. (1982). Developmental integration of preschool children. *Analysis and Intervention of Developmental Disabilities, 2*(2-3), 207-222.
- Bruder, M., & McLean, M. (1988). Personnel preparation for infant interventionists: A review of federally funded projects. Journal of the Division for Early Childhood, 12(4), 299-305.
- Bruder, M., & McCollum, J. (1992). Analysis of state application for year 4 planning for the personnel components of Part H of P.L. 99-457. NEC*TAS Notes, 2.
- Lazzari, A., & Bruder, M. (1988). Teacher evaluation practices in early childhood special education. Journal of the Division of Early Childhood, 12(3), 238-245.



If the Child and Family Outcomes are the Dependent Variables

Personnel Are the.....



Personnel Are the.....

- a) Independent Variable
- b) Dependent Variable
- c) Mediator
- d) Moderator
- e) All of the Above



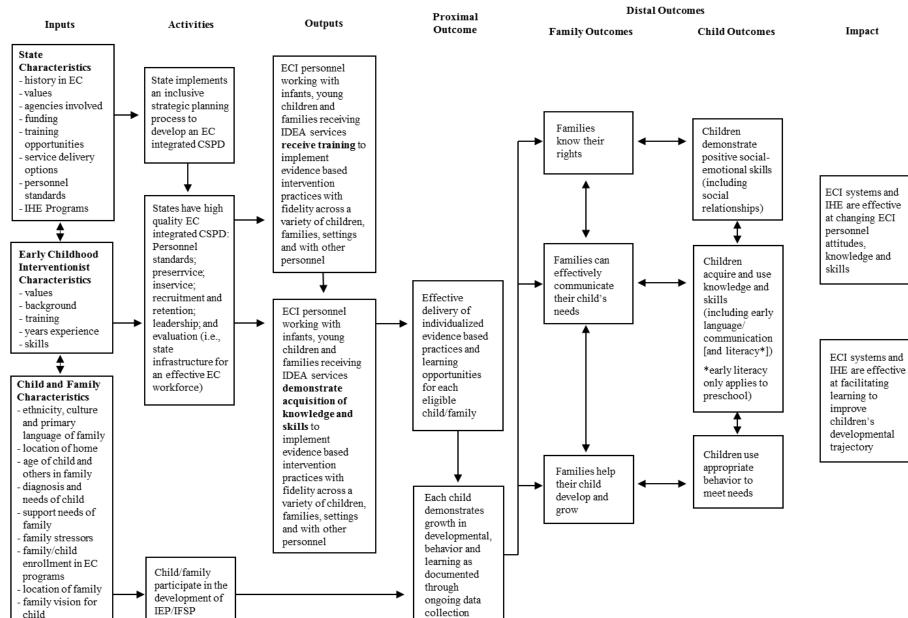
Conclusion

Personnel Can Have a Powerful Impact....

or NOT



Personnel Development Logic Model



The Center's Completed Projects

- **Study I:** The National Landscape of Early Intervention and Early Childhood Special Education
- **Study II:** The Higher Education Survey for Early Intervention and Early Childhood Special Education Personnel Preparation
- Study III: The Analysis of Federally Funded Doctoral Programs in Early Childhood Special Education

Think Tank in Simsbury, CT September 11-12, 2006

Study IV: The Impact of Credentials on Early Intervention Personnel Preparation (Credentialing Part C)

Think Tank in Washington, DC May 24-25, 2006

Study V: Analysis of State Licensure/Certification Requirements for Early Childhood Special Educators (619)

Think Tank in Washington, DC June 11-12, 2007

- **Study VI:** Training and Technical Assistance Survey of Part C & 619 Coordinators
- Study VII: Confidence and Competence of 619/Part C Service Providers



The Center's Ongoing Projects

- Study VIII: Alignment of ECSE Higher Education Curricula with National Personnel Standards
- **Study IX:** Parent Perceptions of Confidence and Competence of 619/Part C Service Providers
- Study X: Case Studies Highlighting States from Study VI on Training and TA

The Center for Early Childhood Policy and Practice



Study I: The National Landscape of Early Intervention and Early Childhood Special Education

State Part C and Section 619 coordinators provided information regarding the organizational structure of their Part C/619 program, supply and demand of personnel and state requirements for personnel.

Reported supports to obtaining qualified personnel:

- Institutes of higher education
- Specific recruitment efforts
- Benefits
- Attractive geographic location
- Characteristics of the field, such as familycentered philosophy
- Training
- Supervision
- Certification
- Grants
- System financial reimbursement

Reported barriers to obtaining qualified personnel:

- A small pool of potential employees that are knowledgeable about the field
- Low salary for EI/ECSE personnel
- Remote/undesirable locations
- Competition with other states
- Lack of support to implement certification standards
- Training issues
- Difficulties with system financial reimbursement



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Study I: The National Landscape of Early Intervention and Early Childhood Special Education: Part C

- Shortages across disciplines: SLPs (76%) OTs (51%), PTs (47%), special educators (40%)
- Need for additional training in early intervention across disciplines: SLPs (38%), OTs (36%), PTs (36%), special educators (29%)
- No CSPD specific to preservice (47%); no CSPD specific to in-service (44%)



Study I: The National Landscape of Early Intervention and Early Childhood Special Education: Part B, 619

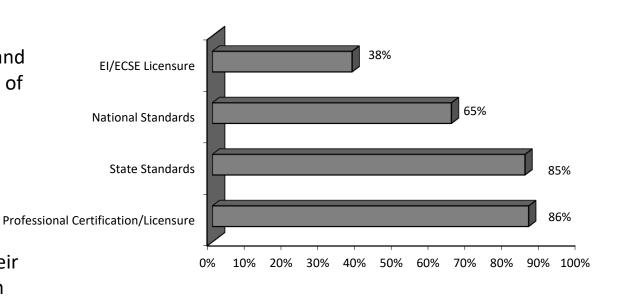
- Shortages across disciplines: SLPs (81%) OTs (48%), PTs (42%), special educators (56%)
- Need for additional training in preschool special education across disciplines: SLPs (21%), OTs (19%), PTs (19%), special educators (19%)
- No CSPD specific to preservice (69%); no CSPD specific to in-service (63%)



Study II: The Higher Education Survey for Early Intervention and Early Childhood Special Education Personnel Preparation

Multidisciplinary faculty
(n=1,085) representing
associate, undergraduate and
graduate programs in each of
the 50 states provided
information about their
preparation of EI/ECSE
service providers.

As depicted in the graph,
participants indicated if their
curricula were aligned with
licensure and/or certification
standards.



Program Alignment



Study II: The Higher Education Survey for Early Intervention and Early Childhood Special Education Personnel Preparation: OSEP Funded Programs

- 48/107 responded (45% response rate)
- Selected content areas addressed by OSEP funded programs: team process (90%), families (87%), research and evaluation (87%), inclusion/natural environments (73%), assistive technology (70%)



Study III: The Analysis of Federally Funded Doctoral Programs in Early Childhood Special Education

- Principal investigators of 23 out of the 28 OSEP funded leadership projects addressing ECSE provided information via survey & phone interview
- On average, programs required 53 credits of coursework and seminars. On average, 11 credits were required with a focus on birth through 5 years, with 7 elective credits.
- Internships/practica 83% allowed students to focus on birth through 5 years
- Research 91% allowed students to focus on birth through 5 years.

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Study III: The Analysis of Federally Funded Doctoral Programs in Early Childhood Special Education

Cost Benefits OSEP Funding

- Recruitment & retention of students
- University relationships
- Curricular benefits
- Enhanced external relationships
- Benefits to the field at large

Implications of No OSEP Funding

- Decreased enrollment & matriculation
- Curricular implications
- Collaboration
- Knowledge base in the field
- Faculty recruitment

Themes From Phone Interviews

- General recruitment strategies
- Recruitment strategies underrepresented groups
- Retention and matriculation
- Cost benefits of OSEP funding
- Implications of no OSEP funding
- Faculty recruitment
- Primary roles of graduates
- Curriculum



Study III: Think Tank Simsbury, CT September 11-12, 2006

Policy Recommendations

- Find a mechanism for evidencebased leadership performance indicators; create common benchmarks for high quality programs
- Investigate supply and demand issues and EI/ECSE leadership in future Center studies
- Increase funding for leadership projects at a high enough level to attract and retain students
- Reinvest in student-initiated grants as a source of support for students

- Clearly define criteria for funding. Target funding for full-time students and to address critical faculty shortages.
- Target marketing of profession to diverse populations
- Improve student mentorship by demystifying and conveying positive aspects of leadership roles
- Find a mechanism to link projects together to share expertise
- Utilize existing resources and create a community of practice (e.g., encourage linkages between UCEDDs and leadership programs)



Study V: Analysis of State Licensure/Certification Requirements for Early Childhood Special Educators (619)

<u>Certification</u> – the set of regulated requirements that lead to initial preparation in ECSE

<u>Endorsement</u> – the set of regulated requirements that are in addition to the requirements for a specific certification (e.g., ECE, SPE)

<u>Blended ECE and ECSE</u> – the set of regulated requirements that lead to initial preparation in both ECE and ECSE through a single certification

Certification Models – Single Route (n=26/38)	n	%
ECSE	13	34
ECSE Endorsement	6	16
Blended ECE & ECSE	3	8
Special Education	2	5
ECSE & Special Education Endorsement	1	3
ECE & Special Education Endorsement	1	3



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Study V: Analysis of State Licensure/Certification Requirements for Early Childhood Special Educators (619)

- 26 of 38 states responding have only one certification model with ECSE being the most common model (examples of others – ECSE endorsement, blended EC/ECSE)
- 11 different age ranges are represented by these models
- 20 states have competency or standards-based models
- 12 of 38 states responding have two or more certification models for ECSE
- 10 different age ranges are represented by these models
- 9 of these states have competency or standards-based models
- 26 states require a nationally or state validated exam to qualify for certification;
 with 17 states requiring one or more PRAXIS II exams for a total of 17 different
 PRAXIS II exams required
- 25 states require some type of induction to the field



Study V: Analysis of State Licensure/Certification Requirements for Early Childhood Special Educators (619)

- 17 of 38 state standards were analyzed to determine the extent to which they align with national standards
- 3 states' standards met or nearly met 100% of ECSE and CEC Common Core standards
- 2 states met 56% and 81% of those standards
- 13 states met 52% or less of those standards
- States' standards met more of the ECSE standards than the CEC Common Core standards
- Standards for four states with blended ECE and ECSE certification met 53% or more of the NAEYC standards



Study V: Think Tank Washington, DC June 11-12, 2007

Challenges

- Multiple systems of personnel preparation and/or certification
- Shortage of personnel
- Capacity building in IHEs to maximize impact on the field
- Alignment of preservice and ongoing professional development
- Insufficient data linking teacher preparation with child outcomes

Priorities

- Align state systems with DEC/NAEYC national standards
- Develop state crosswalks to ensure reciprocity
- Provide supports to IHEs in addressing national standards and certification changes
- Design recruitment programs with incentives for applicants representing diversity & rural areas
- Develop a system for mentoring new professionals
- Educate stakeholders about the certification process
 & define roles
- Involve ECSE experts in defining state certification standards
- Develop partnerships between IHEs and state agencies to align content and standards
- Design evaluation systems linked to standards



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Study VI: Training and Technical Assistance Survey of Part C & 619 Coordinators

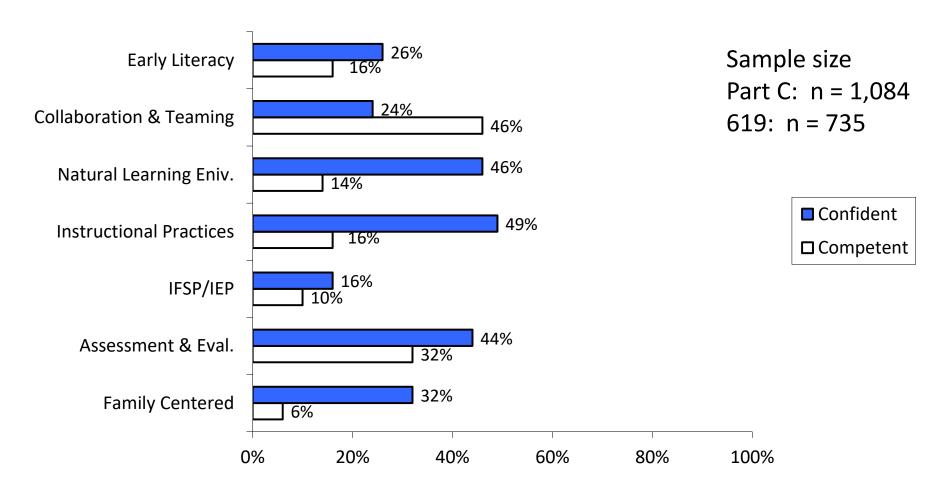
Definition of a Training System: (a) dedicated resources such as an agency budget line-item; (b) staffing; (c) a dedicated agency responsible for the provision of the training; (d) policies or procedures for determining professional development expectations; (e) training content; (f) quality assurance systems; (g) process for identifying and measuring outcomes; (h) on-going, needs based professional development that is provided over-time; (i) a structure for the delivery of content (training modules, etc.), and (j) work-place applicability.

Definition of a Technical Assistance System: (a) dedicated resources such as an agency budget line-item; (b) staffing; (c) a dedicated agency responsible for the provision of the training; (d) policies or procedures for determining professional development expectations; (e) training content; (f) quality assurance systems; (g) process for identifying and measuring outcomes; (h) work-place applicability; (i) provides ongoing TA; (j) individualized professional development; (k) problem solving services, and (l) assists individuals, programs and agencies in improving their services, management, policies, or outcomes.

Part C: 20 states (39%) had a training system & 12 states (23%) had a TA system 619: 23 states (58%) had a training system & 20 states (42%) had a TA system



Study VII: Confidence and Competence of 619/Part C Service Providers



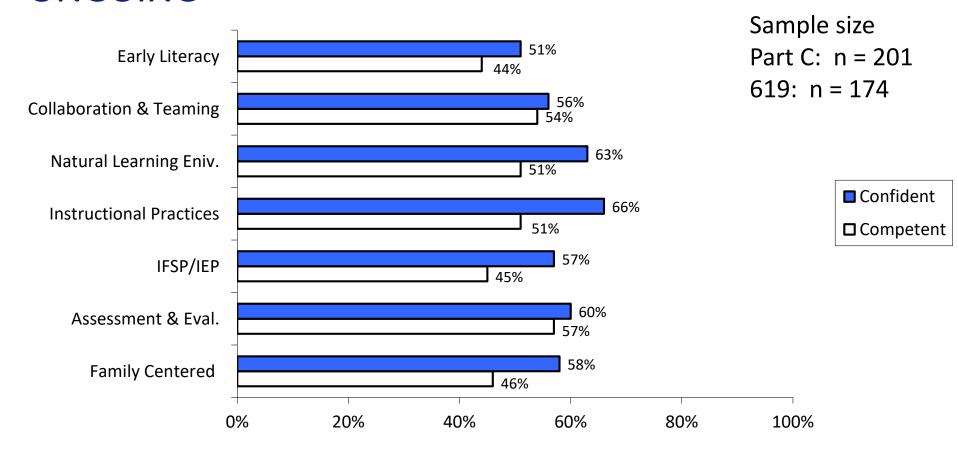


Study VIII: Alignment of ECSE Higher Education Curricula with National Personnel Standards--ONGOING

- Content analysis of higher education syllabi in 15 states in relationship to NAEYC, DEC, CEC standards
- Three states per each of 5 certification models: ECSE, Special Education, Blended ECE and ECSE, ECE endorsement on ECE, ECSE endorsement on special education
- Great variability exists for the representation of national standards across models, states and universities
- National standards are more likely to be represented in ECSE models and least likely to be represented in special education models of certification



Study IX: Parent Perceptions of Confidence and Competence of 619/Part C Service Providers -- ONGOING

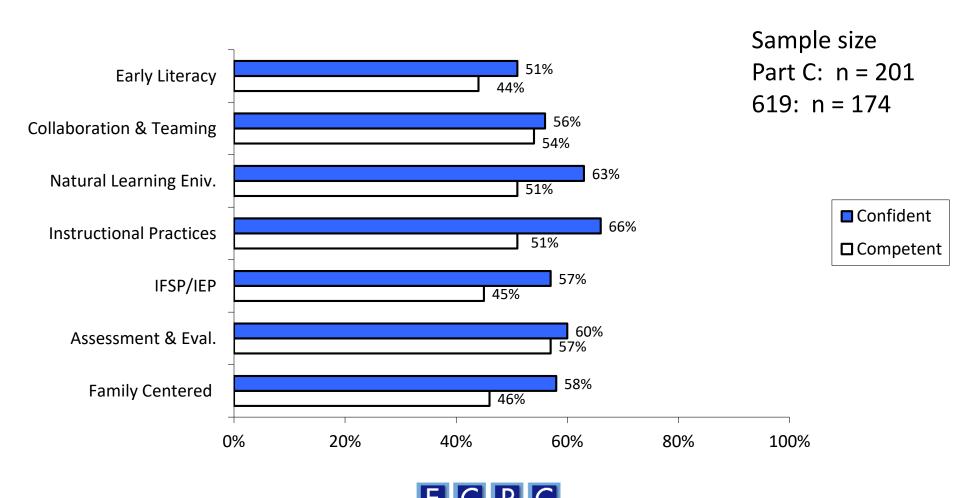


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Study IX: Parent Perceptions of Confidence and Competence of 619/Part C Service Providers -- ONGOING



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Preservice Recommendations: Leadership (Study III)

- Increase the level of funding to recruit and retain students through program completion.
- Target funding to address critical faculty shortages and specific to EI/ECSE.
- Fiscally support projects to link and share expertise to facilitate a unified direction for the field.
- Encourage linkages with UCEDDs and LENDs.
- Decrease and clarify OSEP service obligation.
- Create/require common benchmarks for high quality programs.
- Develop valid and measurable competencies for student and program evaluation.



Inservice Recommendations: Training and TA (Studies VI, VII, IX, X)

- Support training and TA for faculty in IHEs to align curriculum with national standards and evidenced based practice.
- Require state improvement grants/plans to include EI and ECSE training systems that link with the state credential/certification/standards.
- Require that training and TA through state improvement grants be based on national standards.
- Support and encourage "active" family involvement in planning, implementing, and evaluating of training.
- Support training and TA for evidenced based practice and specializations in EI/ECSE
- Encourage alternative training/learning delivery formats.
- Develop valid and measurable competencies for participant and program evaluation.

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Certification/Credential/Standards Recommendations (Study V)

- Continue to support projects that lead to certification/credential/standards, while allowing for specializations for specific disciplines/roles.
- Support projects that meet national standards when there are no state credential/certification (e.g., paraprofessionals, early intervention).
- Support and encourage reciprocity across states (e.g., common standards, state crosswalks).
- Require competency-based standards as the basis for state certification/credentials.



Recommendations for IDEA: CSPD

- Multiple Audiences
- Needs Assessment
- Preservice
- Inservice
- Technical Assistance
- Personnel Standards
- Evaluation



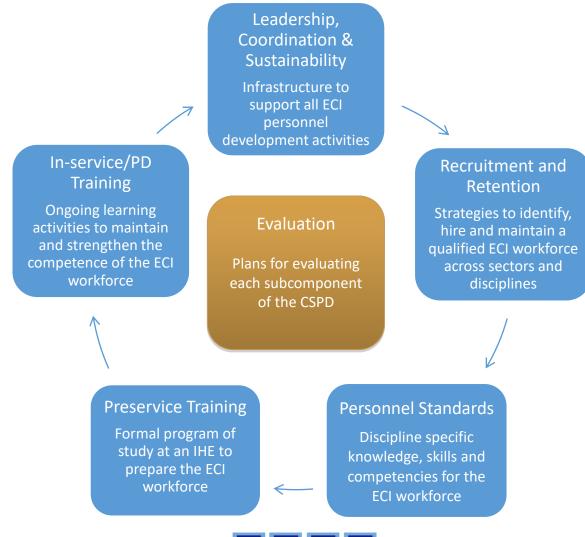
Purpose of Early Childhood Personnel Center

To provide *Technical Assistance*to facilitate the implementation of *Comprehensive Systems of Personnel Development*(CSPD)

for **all** disciplines serving infants and young children with disabilities and their families.



COMPREHENSIVE SYSTEM OF PERSONNEL DEVELOPMENT



Early Childhood Personnel Center

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Comprehensive System of Personnel Development

Leadership, Coordination, & Sustainability	Quality Indicator 1: A cross sector leadership team is in place that can set priorities and make policy, governance, and financial decisions. Quality Indicator 2: There is a written multi-year plan in place to address all sub-components of the CSPD.
State Personnel Standards	 Quality Indicator 3: State personnel standards across disciplines are aligned to national professional organization personnel standards. Quality Indicator 4: The criteria for state certification, licensure, credentialing and/or endorsement are aligned to state personnel standards and national professional organization personnel standards across disciplines.
Pre-service Personnel Development	Quality Indicator 5: Institution of higher education (IHE) programs and curricula across disciplines are aligned with both national professional organization personnel standards and state personnel standards. Quality Indicator 6: Institution of higher education programs and curricula address early childhood development and discipline specific pedagogy.
In-service Personnel Development	Quality Indicator 7: A statewide system for in-service personnel development and technical assistance is in place for personnel across disciplines Quality Indicator 8: A statewide system for in-service personnel development and technical assistance is aligned and coordinated with higher education program and curricula across disciplines
Recruitment and Retention	 Quality Indicator 9: Comprehensive recruitment and retention strategies are based on multiple data sources, and revised, as necessary. Quality Indicator 10: Comprehensive recruitment and retention strategies are being implemented across disciplines.
Evaluation of the System	Quality Indicator 11: The evaluation plan for the CSPD includes processes and mechanisms to collect, store, and analyze data across all subcomponents Quality Indicator 12: The evaluation plan is implemented, continuously monitored, and revised as necessary based on multiple data sources



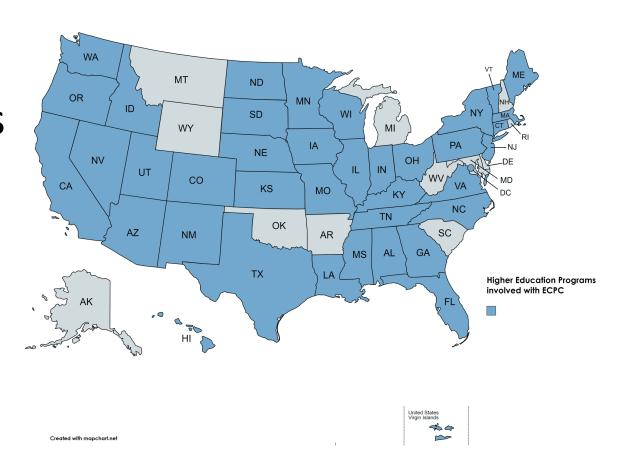
ECPC Cohorts

- IHE Faculty Cohorts
- Family Cohorts
- Doctoral Student Cohorts
- State Professional Development Cohorts



ECPC IHE Faculty Cohort

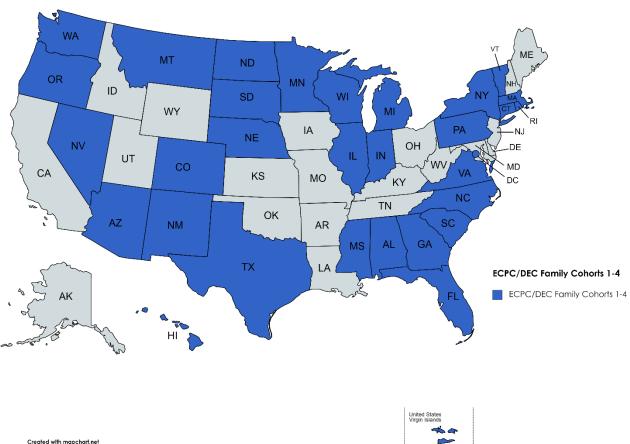
100 Faculty85 Universities34 States





ECPC Family Cohort

60 Families 28 States





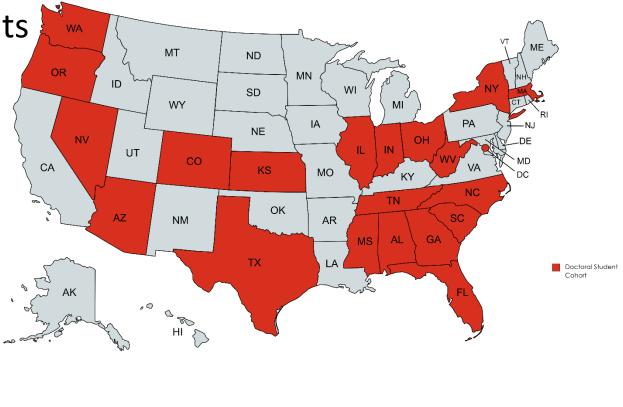


ECPC Doctoral Student Cohort

37 Doctoral Students

29 Universities

22 States

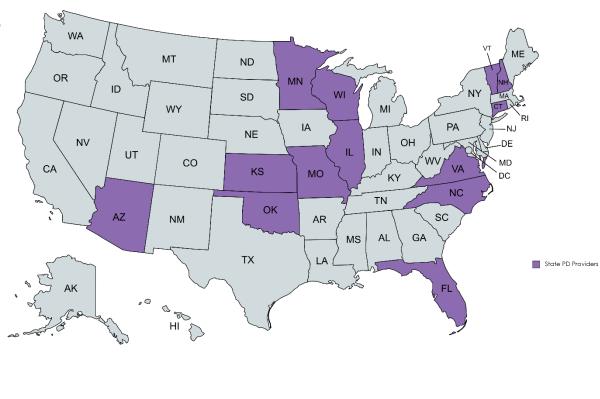


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ECPC State Professional Development Cohort

22 State PD Providers13 States

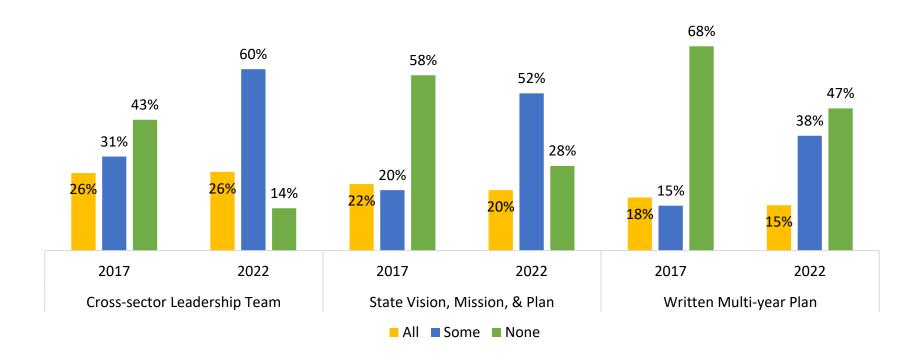




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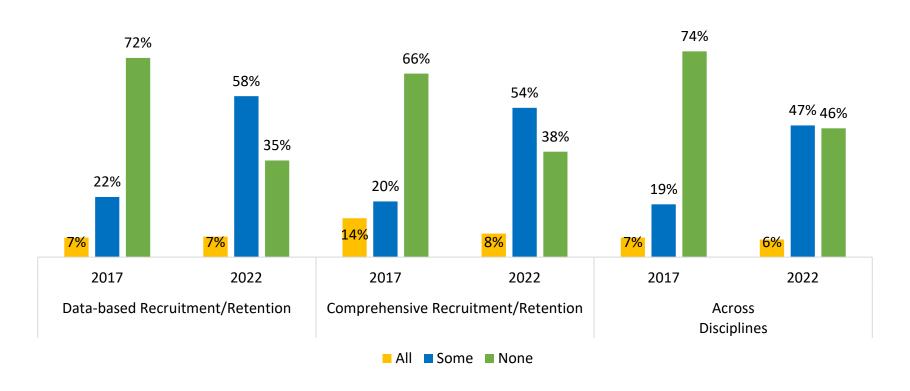
ECPC-CSPD 2017 & 2022 Self Assessments: A Comparative Analysis

Comparing ALL responses Leadership, Coordination, & Sustainability



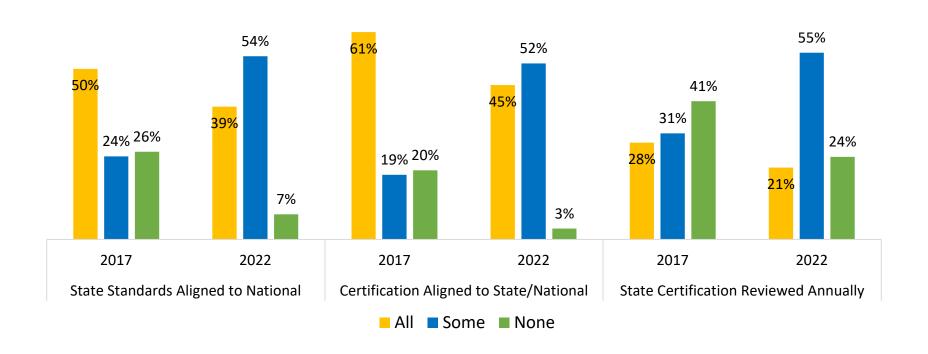


Recruitment and Retention



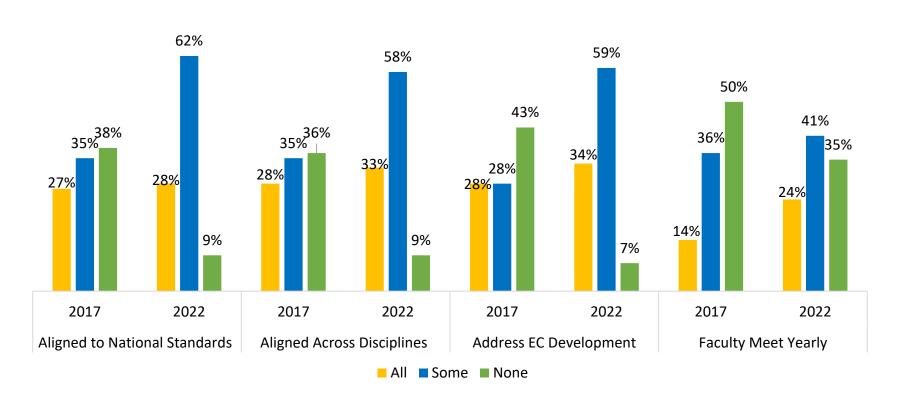


Personnel Standards



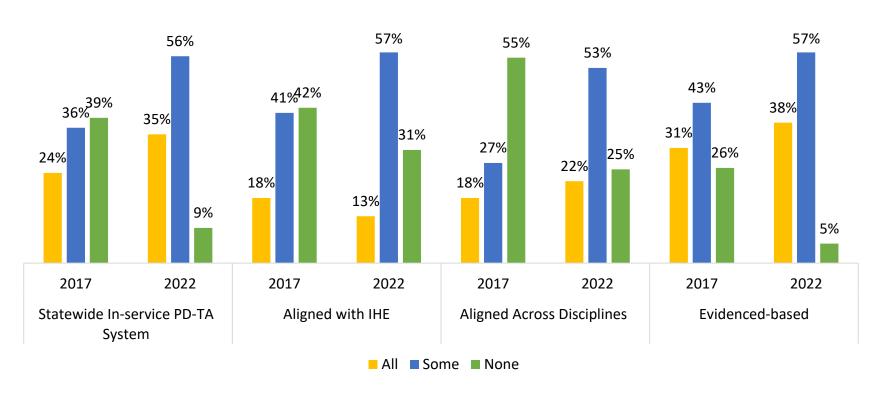


Pre-service Preparation



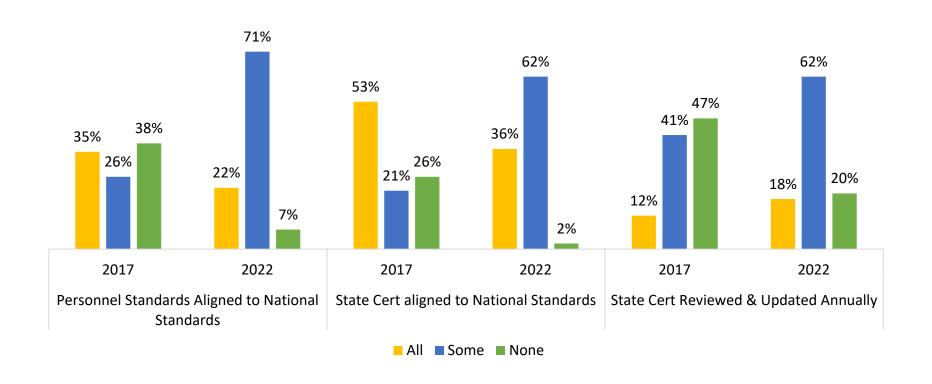


In-service Training



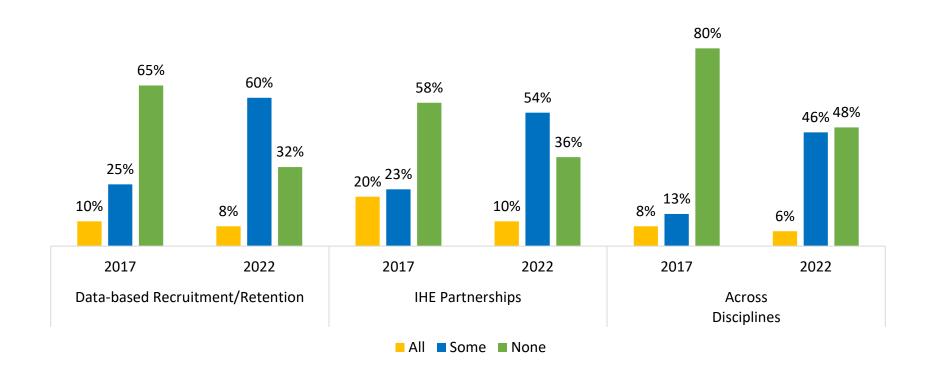


Part B/619 Responses: Personnel Standards





Part C Responses: Recruitment and Retention





Help Wanted: EI/ECSE Workforce Needs: A National Survey

Friedman-Krauss, A. H., Barnett, W. S., Jost, T., & Garver, K. (2023). Early Intervention and Early Childhood Special Education National Workforce Survey Results. *Research Report*. New Brunswick, NJ: **National Institute for Early Education Research**.

In collaboration with the Early Childhood Personnel Center.



Purpose

To provide information about the status of the Early Intervention (EI) and Early Childhood Special Education (ECSE) workforce.



Sample: All but 2 states; DC and 2 Territories

Total Respondents: 4610

• El Providers: 2962

ECSE Related Service Providers: 1105

ECSE Teachers: 962



Sample

	All Respondents	El Providers	ECSE RSPs	ECSE Teachers
Suburban	46.58	47.67	44.34	43.24
Rural	31.49	27.77	37.19	40.23
Urban	21.93	24.59	18.46	16.53



Definitions of the Workforce

Early Intervention (EI) Providers

Professionals who deliver early intervention services to children from birth to age 3 through the Individuals with Disabilities Education Act (IDEA) Part C.

Early Childhood Special Education (ECSE) Related Service Providers

Professionals who deliver early intervention related services (e.g., speech therapy, occupational therapy) to children ages 3 to 5 through IDEA Part B/619.

Early Childhood Special Education (ECSE) Teachers Teachers of children ages 3 to 5 with a disability served through IDEA Part B/619.



Members of the EI/ECSE Workforce

The characteristics of the professionals who make up the EI/ECSE workforce, including demographic information (i.e., age, gender, ethnicity, race, languages spoken), professional roles, work settings, and professional organization memberships.

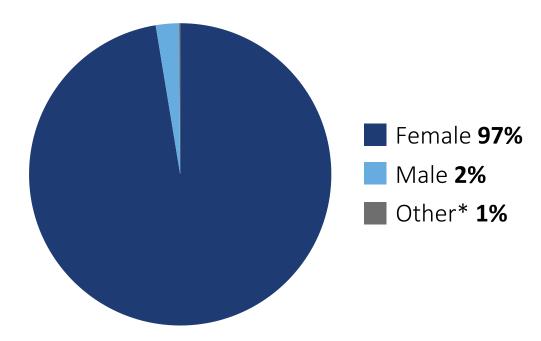


	All Respondents	El Providers	ECSE RSPs	ECSE Teachers
Age				
Mean	45.29	45.73	45.56	43.76
Std. Dev.	11.68	11.94	11.36	10.90
Median	45	45	46	44
Min.	18	22	18	20
Max.	86	86	82	75
Gender (%)				
Female	97.40	97.50	97.48	97.48
Male	2.49	2.44	2.42	2.42
Other/Do not wish to respond	0.11	0.07	0.28	0.11
Ethnicity (%)				
Non-Hispanic/Non-Latino	93.69	92.86	96.07	95.49
Hispanic/Latino	6.31	7.14	3.93	4.51
Race (%)				
White	89.09	87.79	92.84	91.71
Black/African American	4.55	4.94	2.20	4.30
Two or More Races	3.05	3.53	1.84	1.10
Asian	2.43	2.94	1.93	1.15
American Indian/Alaska Native	0.64	0.48	1.01	0.73
Native Hawaiian/Pacific Island		0.31	0.18	0.00
Languages Spoken (%)				
English Only	85.33	82.86	88.11	91.11
Spanish	6.65	8.07	4.52	3.33



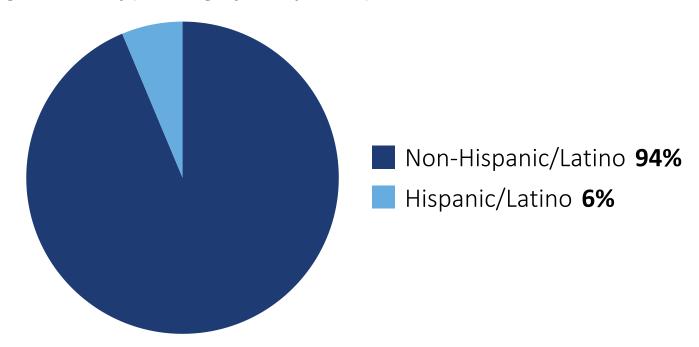
Gender

Figure 1. Gender (Percentage of All Respondents)



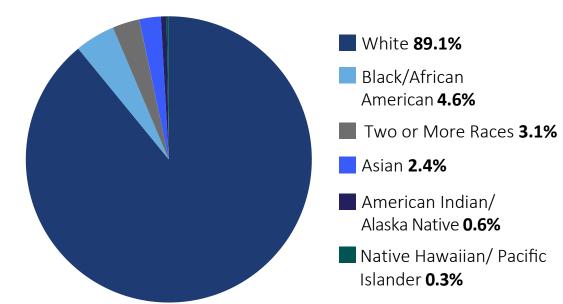
Ethnicity

Figure 2. Ethnicity (Percentage of All Respondents)



Race

Figure 3. Race (Percentage of All Respondents)



Languages Spoken

Figure 4. Languages Spoken (Percentage of All Respondents)

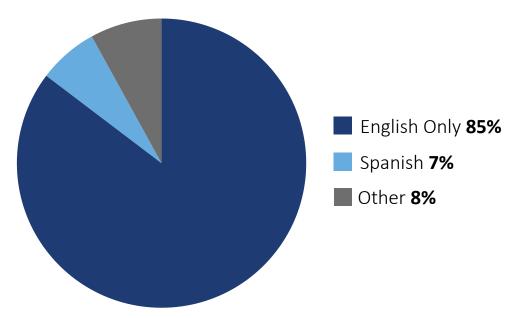


Table 2. Role by Workforce Group (Percentage of Respondents)

	All Respondents	El Providers	ECSE RSPs	ECSE Teachers
Early Interventionist	28.57	32.09	9.63	29.76
Special Education Teacher/Instructor	15.50	4.20	6.36	53.90
Speech-Language Pathologist	18.97	22.91	31.97	1.77
Occupational Therapist	10.25	12.67	17.71	0.21
Physical Therapist	7.76	10.71	11.99	0.10
Service Coordinator Only	6.80	9.39	2.45	0.94
General Education Teacher	2.82	0.88	3.91	6.24
Social Worker	2.04	2.41	2.36	0.42
School Psychologist	1.41	0.37	5.09	0.10
Special Education Teacher Consultant	1.10	0.34	1.45	2.81
Special Education Paraprofessiona	al 1.07	0.24	2.45	1.66
Behavior Analyst	1.05	1.42	0.82	0.10
Special Education & General Education Teacher	0.29	0.00	0.00	1.35
Evaluator	0.22	0.24	0.45	0.00
Speech Assistant	0.16	0.00	0.64	0.00
OT Assistant	0.13	0.20	0.00	0.00
PT Assistant	0.11	0.14	0.27	0.00
Other	1.74	1.80	2.45	0.62



Age of Children Supported by Workforce Group (Percentage of Respondents)

	All	El Providers	ECSE RSPs	
	Respondents			Teachers
Infants (0 to 18 months)	59.22	85.92	44.20	5.93
Toddlers (19 to 35 months)	68.35	95.54	55.62	14.03
Preschoolers (3-year-olds)	54.58	39.84	88.95	81.70
Preschoolers (4-year-olds)	51.15	30.96	90.40	90.02
Kindergarteners	16.51	15.53	36.23	10.29
School-Age Children	16.11	16.88	35.87	4.89



Table 4. Service Delivery Settings by Workforce Group (Percentage of Respondents)

	All Respondents	EI Providers	ECSE RSPs	ECSE Teachers
School				
Public School	41.47	20.12	68.39	85.45
Private School	9.06	9.08	17.84	7.80
Other Type of School*	1.14	0.61	2.26	1.66
Child Care				
Child Care Center	41.56	52.23	40.04	20.69
Family Child Care Setting	21.61	28.83	19.57	7.59
Head Start/Early Head Start	20.83	23.02	27.99	15.28
Home				
Child's Home	64.55	90.65	52.08	11.75
Other				
Therapeutic Center or Clinic	9.79	12.86	10.96	2.18
Virtual	2.43	3.51	0.91	0.10
Natural Environment	0.83	1.22	0.00	0.10
Early Intervention	0.45	0.51	0.27	0.31
Other	0.98	1.25	0.45	0.62



Table 5. School- and Center-Based Contexts for Service Delivery by Workforce Group (Percentage of Respondents)

	All Respondents	El Providers	ECSE RSPs	ECSE Teachers
Class/room (0-49% of children with IEP/IFSP)	44.69	44.47	56.21	40.34
Class/room (50-99% of children with IEP/IFSP)	29.36	22.21	39.82	34.87
Self-contained special ed classroom (100% of children with IEP/IFSP)	24.91	17.15	38.73	32.83
Resource room for small group/individualized instruction	14.73	12.96	26.32	11.05
Class/room (children with and without IEP/IFSP; percentages not reported)	2.63	4.29	1.49	0.64
Multiple settings	0.63	0.31	0.89	0.21
Other	0.08	0.15	0.00	0.00



Professional Organization Membership

65% of respondents reported no affiliation/membership with a professional organization.



Table 6. Membership in Professional Organizations by Workforce Group (Percentage of Respondents)

	All Respondents	El Providers	ECSE RSPs	ECSE Teachers
None	65.11	65.12	69.11	63.62
Division for Early Childhood (DEC)	6.13	5.67	3.80	8.84
National Association for the Education of Young Children (NAEYC)	9.39	5.98	7.34	19.75
Zero to Three	7.47	9.72	3.62	3.01
State affiliate of NAEYC	3.12	2.26	2.99	5.20
International Society of Early Intervention (ISEI)	0.91	0.98	0.72	0.52
The Alliance for the Advancemen of Infant Mental Health (AAIMH	0.07	1.18	0.54	0.10
Other	8.05	8.98	9.87	4.57



Preparation, Qualifications, and Knowledge

Information about respondents'

level of education,

qualifications for their positions,

and knowledge about key EI/ECSE topics.



Figure 21. Highest Level of Education by Workforce Group (Percentage of All Respondents)

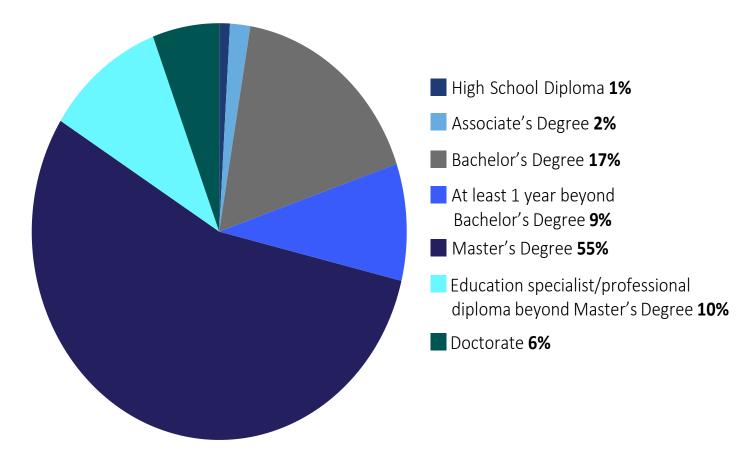




Table 16. Age Ranges for Licenses and/or Certifications Held by Workforce Group (Percentage of Respondents)

	All Respondents	El Providers	ECSE RSPs	ECSE Teachers
Birth to 3 years	23.03	31.10	15.26	8.81
Birth to 5 years	24.08	21.73	23.13	34.21
3 years to 5 years	15.96	12.59	20.85	21.30
Birth to 3rd grade	17.67	15.65	14.79	26.76
Pre-K to 3rd grade	16.06	12.97	16.59	23.92
Life Span	44.68	54.63	63.03	11.96
Elementary School/School Age	22.42	20.20	22.46	28.12
Other ECE Age Range	0.68	0.61	0.38	1.05
Other Age Range	0.46	0.50	0.19	0.52



Topics Assessed for Knowledge

- 1. My state's Early Learning and Development Standards
- 2. Normative sequences of early childhood development and environmental and biological factors that impact development
- Family-centered practices that support families to make informed decisions and advocate for their own and their child's needs
- 4. Engage with families to identify their own strengths and needs and those of their child so they may support children's development
- 5. Collaborating with other team members across multiple disciplines during assessment, intervention and evaluation
- Partnering with families and other professionals to develop IEPs/IFSPs and support transitions
- 7. Authentic, informal and formal assessment models that are culturally and linguistically appropriate for all children



Continued -Topics

- 8. Using data from child assessments and interventions for planning and evaluations
- 9. Use of evidence-based curricula frameworks to inform and guide interventions
- 10. Delivery of homebased service models
- 11. Delivery of services in community based early childhood programs
- 12. Delivery of services in inclusive classrooms
- 13. Delivery of individualized systematic, responsive, and intentional evidencebased practices with fidelity
- 14. Social-emotional competence and positive interventions to support challenging behavior
- 15. Reflective practice, leadership and advocacy to ensure children and families are provided appropriate and individualized services and intervention to meet their needs

All Respondents

		Not at all Knowledgeabl	A little le Knowledge	Somewhat eable Knowledgeab	Very ole Knowledgeable
1.	My State's Early Learning and Development Standards	2.76	11.89	43.25	42.10
2.	Normative sequences of early childhood development	0.76	3.82	29.16	66.26
3.	Family-centered practices that support families to make informed decisions	0.79	6.16	34.46	58.60
4.	Engage with families to identify their strengths and needs to support child development	0.50	4.26	25.43	69.82
5.	Interdisciplinary collaboration	0.34	2.20	16.82	80.64
6.	Partnering with families and professionals to develop IEPs/IFSPs and support transitions	0.63	3.53	19.18	76.66
7.	Culturally and linguistically appropriate assessment models for all children	1.10	8.00	41.15	49.74
8.	Data-based decision making	0.47	3.30	22.10	74.12
9.	Selection of evidence-based interventions	0.94	6.40	37.53	55.12
10	. Delivery of services in homes	4.12	12.18	25.65	58.04
11	. Delivery of services in community- based programs	2.80	10.62	36.00	50.59
12	. Delivery of services in inclusive classrooms	4.05	12.25	34.53	49.17
13	. Delivery of individualized evidence- based practices with fidelity	2.54	8.00	38.38	51.08
14	. Positive supports for social- emotional needs and challenging behavior	0.52	6.73	39.28	53.48
15	. Reflective practice, leadership,	0.77	7.21	38.36	53.66



Topics for which about half (or fewer) of EI providers reported they were *very knowledgeable:*

Topic 1: My state's Early Learning and Development Standards (38%)

Topic 7: Authentic, informal and formal assessment models that are culturally and linguistically appropriate for all children (49%)

Topic 12: Delivery of services in inclusive classrooms (40%)

Topic 13: Delivery of individualized systematic, responsive, and intentional evidence-based practices with fidelity (49%)



Topics for which about half (or fewer) of Part B Related Service Providers reported they were very knowledgeable:

- **Topic 1:** My state's Early Learning and Development Standards (35%)
- **Topic 3:** Family-centered practices that support families to make informed decisions and advocate for their own and their child's needs (50%)
- Topic 7: Authentic, informal and formal assessment models that are culturally and linguistically appropriate for all children (51%)
- Topic 9: Use of evidence-based curricula frameworks to inform and guide interventions (54%)
- **Topic 10:** Delivery of homebased service models (50%)
- **Topic 11:** Delivery of services in community based early childhood programs (53%)
- **Topic 14:** Social-emotional competence and positive interventions to support challenging behavior (51%)
- Topic 15: Reflective practice, leadership, and advocacy to ensure children and families are provided appropriate and individualized services and intervention to meet their needs (52%)



Topics for which about half (or fewer) of ECSE teachers reported they were *very knowledgeable*:

- **Topic 3**: Family-centered practices that support families to make informed decisions and advocate for their own and their child's needs (43%)
- **Topic 4**: Engage with families to identify their own strengths and needs and those of their child so they may support children's development (54%)
- **Topic 7**: Authentic, informal and formal assessment models that are culturally and linguistically appropriate for all children (50%)
- **Topic 10**: Delivery of home-based service models (20%)
- **Topic 11**: Delivery of services in community based early childhood programs (38%)
- **Topic 15**: Reflective practice, leadership, and advocacy to ensure children and families are provided appropriate and individualized services and intervention to meet their needs (52%)



Professional Development

The professional development supports available to members of the EI/ECSE work force workforce, including the types of supports, hours of professional development, helpfulness of the supports, scheduled planning time, and needs for additional supports.



Need for More Professional Development

- Types, content, and hours of available professional development varied widely across respondents.
- Most respondents reported a need for more and stronger supports.

Challenges in the Field

The primary challenges faced by the EI/ECSE workforce, including low compensation, high caseloads and other work demands, and levels of stress.



Longevity and Career Changes

Respondents' longevity in the EI/ECSE workforce their reasons for staying, and potential plans to leave.



Plans to Leave the Field

 40% of respondents reported they are likely or very likely to leave the EI/ECSE workforce in the next 5 years.

• 25% reported looking for a new job outside the EI/ECSE field in the last 6 months.

Levels of Stress

- One-quarter (27%) of ECSE Teachers reported severe or potentially dangerous levels of stress.
- Nearly one-fifth of ECSE Related Service Providers reported severe or potentially dangerous stress levels.
- 14% of El Providers reported *severe* or *potentially dangerous* stress levels.



Demographic Mismatch

The EI/ECSE workforce is comprised of White (89%), non-Hispanic/Latina (94%) females (97%) who speak only English (85%), with an average age of 45.



Qualified Workforce

84% of all respondents held a certification or license.

- 58% for the early childhood years.
- 37% for the lifespan.



Low Compensation

 Of those who reported a salary, the two most frequently reported salary categories were \$50,000 to \$59,000 and \$60,000 to \$69,000.

 Those with higher educational attainment tended to earn higher salaries.



EI/ECSE Personnel Needs and Training Programs



National Inventory

- Inventory of EI/ECSE educator preparation programs across 57 states/territories
- Examples of data collected:
 - State, IHE, Title of program
 - Program details (i.e., accreditation, credits, coursework, practicum, contact)
 - Credentialing information (i.e., age bands, type/category of credential)



Development of Coding Manual

Eight data collectors

Six Graduate-level students, two UCEDD Staff personnel

Developed consistent procedures

IHE websites in CT

Coding manual: ensure consistent procedures, and operational definitions of key terms

Incorporated common terminology

Continuous review of the coding manual

Additional feedback from faculty

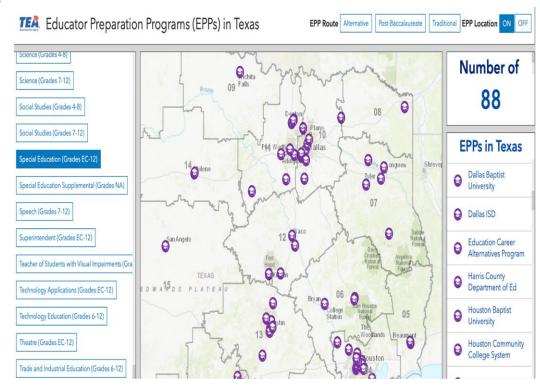


Methodology: Data Collection Process

- States were divided amongst data collectors
- State licensure for each state/territory was reviewed prior to coding

Example: Texas

- Early Childhood Education
 Pre-K to Grade 3
- Early Childhood Education,
 Pre-K to Grade 6
- Special Education, Early Childhood to Grade 12





Methodology: Data Collection Process

- Information for each Institute of Higher Education (IHE) was gathered from the Institute of Education Sciences, National Center for Education Statistics, and the Integrated Postsecondary **Education Data System (IPEDS)**
 - a. Information Gathered:
 - **IHE Name**
 - ii. Carnegie Classification 2021
- Data collectors visited each IHE website and searched for the following key terms: Early Childhood Education (ECE); Early Childhood Special Education (ECSE); Early Intervention (EI); Teacher Preparation; Special Education (SE); Elementary Education; etc.



Methodology: Data Collection Process

Inclusion Criteria	Exclusion Criteria
Undergraduate level (BA/BS)	Community colleges
Graduate level (Cert., MA/MS, PhD, EdS)	Undergraduate minors (unless leading to credentialing) Director programs
Resulting in working with target population (early childhood ages based on state licensure)	Administrative programs
Resulting in teacher licensure (i.e., no degree programs, alternate route programs)	Associate level Programs



Variables of Interest

- → Total Number of IHEs
- → Total Number of Programs
- → Programs by "Program Type"
 - EI/ECSE, Special Ed,
 Dual, Blended
- → Programs by Level of Degree
 - Bachelor's, Master's,
 Advanced Certificate,
 etc.

- → Alternate Routes to Certification
- → Category and Age Bands of Credentialing
- → Carnegie Classification
- → Program Contact Information
- → Course Content
 - Disability, Inclusion,
 Diversity & Practicum
 Information



Methodology: Reliability Process

All data collectors submitted completed programs weekly.

20% of all programs submitted each week were coded independently by a trained graduate assistant.

Percent agreement was calculated for:

- •Individual Program
- Each Data Collector
- Overall Agreement (across programs/data collectors)

Weekly meetings were held to address all discrepancies.

Reliability was also completed for each state to check for the number of programs found.



Full Dataset: Inter-Rater Reliability

Round (Date)	Percent Agreement (%)	Round (Date)	Percent Agreement (%)
Round 1 (8/25/22)	94.03	Round 8 (10/13/22)	93.77
Round 2 (9/1/22)	93.52	Round 9 (10/20/22)	90.79
Round 3 (9/8/22)	94.47	Round 10 (10/27/22)	91.71
Round 4 (9/15/22)	93.58	Round 11 (11/3/22)	90.64
Round 5 (9/22/22)	93.96	Round 12 (11/10/22)	93
Round 6 (9/29/22)	92.10	Round 13 (11/17/22)	96.31
Round 7 (10/06/22)	94.5		



Methodology: Course Content Analysis

- All ECSE and Blended undergraduate and graduate programs were copied into a new document from the National Inventory for course content analysis
- Coding Rubrics were developed by the research team for three content areas:
 - Disability, Inclusion, and Diversity

Methodology: Course Content Analysis

- 3. Programs were divided amongst the research team, and the department code, title, and description of each course was coded:
 - Disability, Inclusion, Diversity, and Practicum Credits/Setting
 - Practicum coursework was coded as:
 - Practicum: Dedicated practicum, internship, fieldwork course
 - Embedded Practicum: Content course including fieldwork experience (e.g., Reading, Science, etc.)
- 4. Weekly reliability was completed for 20% of all programs coded



Disability Rubric

		For Students With	and Without Disabilities	For Students	with Disabilities
	1	2 (Ages 0-8)	3	4 (Ages 0-8)	5
Criteria	Course dept. code, title, and/or description does not mention disability search terms.	Course dept. code, title, and/or description includes young children (ages 0 to 8) with disabilities and without (i.e., 'typically developing,' 'for students with and without disabilities').	Course dept. code, title, and/or description includes children with disabilities and without (i.e., 'typically developing,' 'for students with and without disabilities'), but does not specify an age range or the age range goes beyond 0 to 8.	Course dept. code, title, and/or description includes young children (ages 0 to 8) with disabilities.	Course dept. code, title, and/or description includes children with disabilities but does not specify an age range or the age range goes beyond 0 to 8.
Keywords	Disability keywords include: early intervention, early childhood special education, disabilities, delays, at-risk, special education, exceptionalities, physical impairment, dyslexia, learning disorder, special needs, handicap, emotional disorder, behavioral disorder	Early childhood disability keywords include: early intervention, early childhood special education	Disability keywords include: disabilities, delays, at-risk, special education, exceptionalities, physical impairment, dyslexia, learning disorder, special needs, handicap, emotional/behavioral disorders, etc.	Early childhood disability keywords include: early intervention, early childhood special education, young children?	Disability keywords include: early intervention, early childhood special education, disabilities, delays, at-risk, special education, exceptionalities, physical impairment, dyslexia, learning disorder, special needs, handicap, emotional disorder, behavioral disorder



Inclusion Rubric

	Lecture	Practicum	Lecture + Practicum	
	a	b	С	d
Criteria	Course dept. code, title,	Course dept. code, title,	Course dept. code, title,	No mention of
	and/or description states	and/or description states	and/or description of	inclusion search
	inclusive teaching, strategies,	inclusive practicum	inclusive	terms
	learning, for children with and	placement, clinical	teaching/strategies/etc. (a)	
	without disabilities (or with	experience, internship for	WITH inclusive	
	disabilities). *No fieldwork,	children with and without	practicum/fieldwork/observ	
	practicum or related	disabilities (or with	ation (b).	
	experience.	disabilities).		
Keywords	Keywords: inclusion, inclusive,	Keywords: inclusion,	Keywords: inclusion,	Does not mention:
	unified, blended, include with	inclusive, unified, blended,	inclusive, unified, blended,	inclusion, inclusive,
	and without disability,	include with and without	include with and without	unified, blended,
	integrated(check to make sure	disability, integrated(check to	disability, integrated(check	include with and
	in reference to inclusion),	make sure in reference to	to make sure in reference	without disability,
	least restrictive environment,	inclusion), least restrictive	to inclusion), least	integrated(check to
	incuding those with	environment, incuding those	restrictive environment,	make sure in
	exceptionalities, including	with exceptionalities	incuding those with	reference to
	special needs learners,		exceptionalities	inclusion), least
	inclusionary settings			restrictive
				environment,
				incuding those with
				exceptionalities



Diversity Rubric

Diversity Column	Verbiage	Search Terms	Examples
code: 1	Language	English language learners, Bilingual education, Linguistic diversity	EDUC 692 Observing and Assessing the Young Child with Disabilities []Candidates learn to apply skills to effectively communicate with teachers and parents of English language learners
code: 1	Culture	Culture, Cultural, Sociocultural	SPED 6300 - Effective Practices with Culturally and Linguistically Diverse Populations Students will learn evidence-based evaluation and intervention practices with culturally and linguistically diverse (CLD) populations. Bilingual development, working with CLD families and the impact of culture on development will also be covered.
code: 1	Diverse students, families, populations	diverse students, diverse families, diverse populations, diversity, diverse	EDU 322 - Family, School, Community Partnerships Theories and practices for building strong family, school, and community relationships; programs and approaches to help teachers to encourage parent involvement and effectively support diverse families.
code: 0	No mention of diversity	No language referencing diversity, race, culture, religion, ethnicity, etc. *"Diverse learners," "Diverse classroom," and "Diverse settings" were considered outside the scope of this category.	EDSPE (Special Ed) 501 Foundations of Inclusive Education Using a disability studies in education lens, provides an overview of these foundational issues in special education, so teacher candidates understand the complexities of students, families, and schools and can facilitate inclusive, equitable learning experiences for all students



Disability and Inclusion Course Content: Masters Degree

Disability Content

Course type	ECSE Disability	Blended Disability
Either/Or	53%	40%
Elective	73%	40%
Required	79%	50%

Inclusion Content

Course type	ECSE Inclusion	Blended Inclusion
Either/Or	7%	12%
Elective	6%	30%
Required	11%	16%



Disability and Inclusion Course Content: Bachelor's Degree

Disability Content

Course type	ECSE Disability	Blended Disability
Either/Or	28%	15%
Elective	89%	33%
Required	51%	39%

Inclusion Content

Course type	ECSE Inclusion	Blended Inclusion
Either/Or	4%	3%
Elective	16%	0%
Required	7%	11%



ECSE Data: Inter-Rater Reliability

Inter-rater reliability (6/5/23-7/10/23)

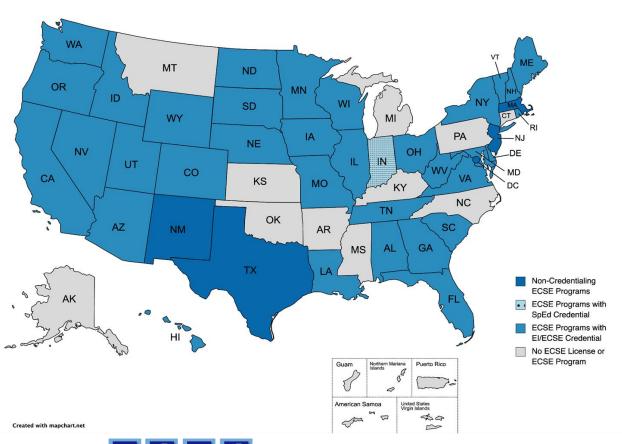
Round (Date)	Percent Agreement %
Round 1 (6/5/23)	89.99%
Round 2 (7/3/23	94.18%
Round 3 (7/6/23	94.69%
Round 4 (7/10/23)	93.71%

ECSE Programs

- 40 States
- 168 Institutes of Higher Education

336 Programs

Figure 1
States with EI/ECSE
Programs and
Respective
Credentialing





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Table 1 *Number of Programs per Level of Degree*

Level of Degree	Number of Programs (n=330)
Bachelor's	50
Master's	154
No Degree	65
Graduate Certificate	21
Integrated Bachelor's/Master's	2
Postbaccalaureate Certificate	1
Certificate of Advanced Graduate Studies	14
Ed.S.	2
Certificate in conjunction with a Bachelor's	1



Figure 2 Number of Programs per Level of Degree Across States (n=330)

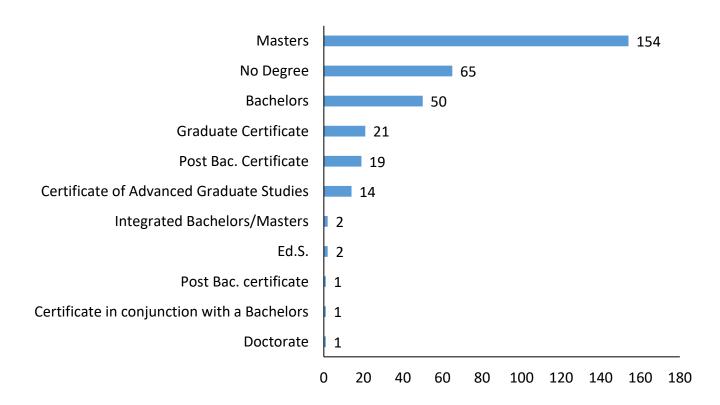




Table 2 *Age Band Range by Program*

Course Type (Number of Courses)	%
Birth to 5 years	45
Birth to 8 years	45
Birth to over 8 years	11



Table 3 Average Percent of Coursework with Diversity terms Across **Programs**

Course Type (Number of Courses)	%
Required (4197)	20
Either/Or (747)	18
Elective (163)	18



Table 4

Average Percent of Coursework Mentioning Disability Across **Programs**

Course Type (Number of Courses)	%
Required (4197)	71
Either/Or (747)	75
Elective (163)	49



Table 5

Average Percent of Coursework Mentioning Inclusion Across Programs

Course Type (Number of Courses)	%
Required (4197)	9
Either/Or (747)	7
Elective (163)	6



Blended Data: Inter-Rater Reliability

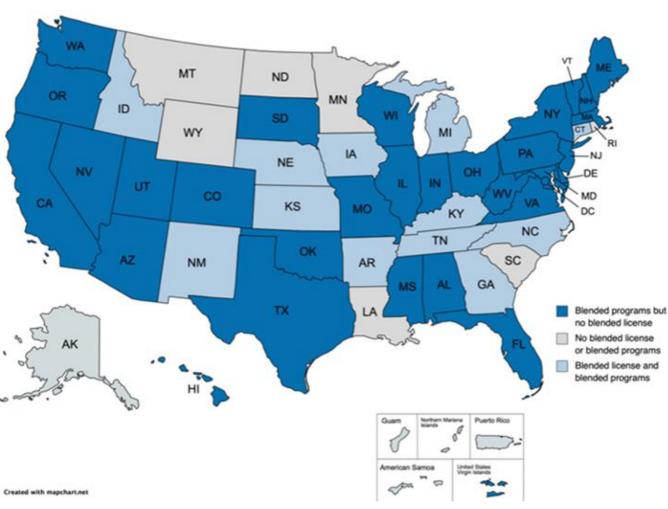
Round (Date)	Percent Agreement (%)
Round 1 (7/18/23)	89.99
Round 2 (8/7/23)	94.18
Round 3 (8/21/23)	94.69
Round 4 (8/25/23)	93.71



Blended Programs

- 44 States
- 249 Institutes of **Higher Education**
- 485 Programs

Figure 1 States with Blended Programs and Respective Credentialing





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Table 1 Number of Programs per Level of Degree

Level of Degree	Number of Programs (n=480)
Bachelor's	244
Master's	153
No Degree	39
Graduate Certificate	20
Integrated Bachelor's/Master's	8
Postbaccalaureate Certificate	8
Certificate of Advanced Graduate Studies	5
EdS	2
Certificate in conjunction with a Bachelor's	1



Table 2 *Age Band Range by Program*

Course Type (Number of Courses)	%
Birth to 5 years	34
Birth to 8 years	53
Birth to over 8 years	13



Figure 2 Number of Programs per Level of Degree (n=480)

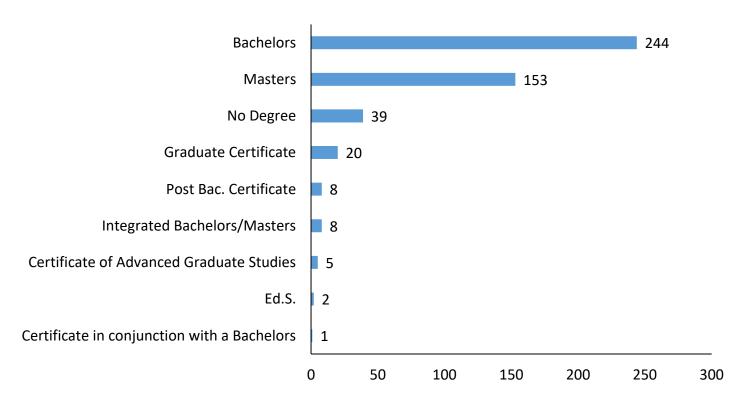




Table 3Average Percent of Coursework with Diversity terms Across Programs

Course Type (Number of Courses)	%
Required (9067)	23
Either/Or (1021)	22
Elective (51)	18



Table 4 *Average Percent of Coursework Mentioning D*

Average Percent of Coursework Mentioning Disability Across Programs

Course Type (Number of Courses)	%
Required (9067)	42
Either/Or (1021)	25
Elective (51)	27



Table 5

Average Percent of Coursework Mentioning Inclusion Across Programs

Course Type (Number of Courses)	%
Required (9067)	14
Either/Or (1021)	6
Elective (51)	6



Questions?

Contact Information

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