The Center to Inform Personnel Preparation Policy and Practice in Early Intervention and Preschool Education

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BRIEFING BOOK

Site Visit – Friday, December 10, 2004

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Center to Guide Personnel Preparation Policy and Practice in Early Intervention and Preschool Education (Birth to 5)

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SECTION 1: PROJECT OVERVIEW

1.1. RFP

Background: The cornerstone of successful implementation of the IDEA Amendments of 1997 is the assurance that infants, toddlers, and preschoolers with disabilities are served by an adequate number of highly qualified personnel.

Priority: The Assistant Secretary establishes an absolute priority to support a Center to guide the development of policy and practice for personnel preparation in early intervention and preschool education. The Center is to do this by examining issues and recommending actions to ensure an adequate supply of well-qualified personnel to serve infants, toddlers, and preschoolers with disabilities. These personnel include early intervention service providers, special educators, speech-language pathologists, audiologists, occupational therapists, physical therapists, psychologists, social workers, nurses, nutritionists, family therapists, orientation and mobility specialists, pediatricians and other physicians, and paraprofessionals.

The Center must do the following:

(a) Conduct a comprehensive review of literature in the following subject areas:

(1) Licensure and certification standards and requirements, including alternative certification options, for personnel serving infants, toddlers, and preschoolers with disabilities. This review must include, at a minimum, available information across all States and for each type of personnel, on –

(i) Motivations for changes in, and resulting modifications to, licensure standards and requirements; and

(ii) Intended versus actual impacts of these standards and requirements, and changes to these standards and requirements, on personnel quantity and quality.

(2) Preservice preparation for personnel to serve infants, toddlers, and preschoolers with disabilities. The purpose of this review is to develop a profile of current training programs for all types of personnel who serve infants, toddlers, and preschoolers with disabilities. The profile must provide detailed descriptions of training programs at the institutional, State, and national levels. The review must include, at a minimum, available information on –

(i) Mechanisms for entering programs, such as admissions criteria and recruitment strategies;

(ii) Features of programs, such as program level (associate, undergraduate, graduate), faculty-trainee ratios, the ratios of tenure-track faculty to adjunct faculty, internal and external sources of support (including State support and OSEP and other Federal support), training emphasis (for example, multi-age program, multi-age program with early childhood focus, early-intervention program, preschool program) and program history.

(iii) Content features of programs, such as alignment with the principles and requirements of IDEA, alignment with current licensure and certification standards, the extent to which program content reflects research-based knowledge and practice, practicum opportunities, cross-disciplinary arrangements with other relevant programs, and collaborative relationships with service providers for infants, toddlers, and preschoolers with disabilities to provide employment support;

(iv) Demographic characteristics of students, such as age, prior training and experience, racial and cultural diversity, and disability;

(v) Indicators of program quality assurance, such as procedures for assessing program quality (including on-the-job performance of students completing the program); and

(vi) Program outcomes, such as (A) the number of students completing the program; and (B) the employment data regarding relevant positions for students completing the program, including the length of employment and proximity to the location of the training program.

(3) Current and projected supply of, and demand for, personnel to serve infants, toddlers, and preschoolers with disabilities. This review must include, at a minimum, available information, at the national, State, and local levels, on –

(i) The extent to which there exists, or will exist, an imbalance between available personnel and demand for personnel;

(ii) The extent to which identified discrepancies in supply and demand vary by personnel type and locality; and

(iii) Factors that influence discrepancies in supply and demand, such as salaries and wages, general economic climate, population demographics, licensure and certification standards and requirements, and proximity to relevant training programs.

(b) Identify critical gaps in current knowledge, and design and conduct a program to address these gaps. The project must identify the most critical gaps on the basis of the review described in paragraph (a). The program to address the gaps must –

(1) Be guided by a conceptual framework that (i) integrates the most pressing needs for expanded knowledge; and (ii) yields information that can be used to develop policies and practices at all levels (Federal, State, and local, as well as in institutions of higher education);

(2) Use a scientifically based research and evaluation methodology that is reviewed and accepted by panels of content, research, and evaluation experts. The project must identify these panels in collaboration with OSEP staff and convene the panels; and

(3) Be designed to enhance, not duplicate, any current research and evaluation efforts, including those supported by OSEP and other Federal agencies.

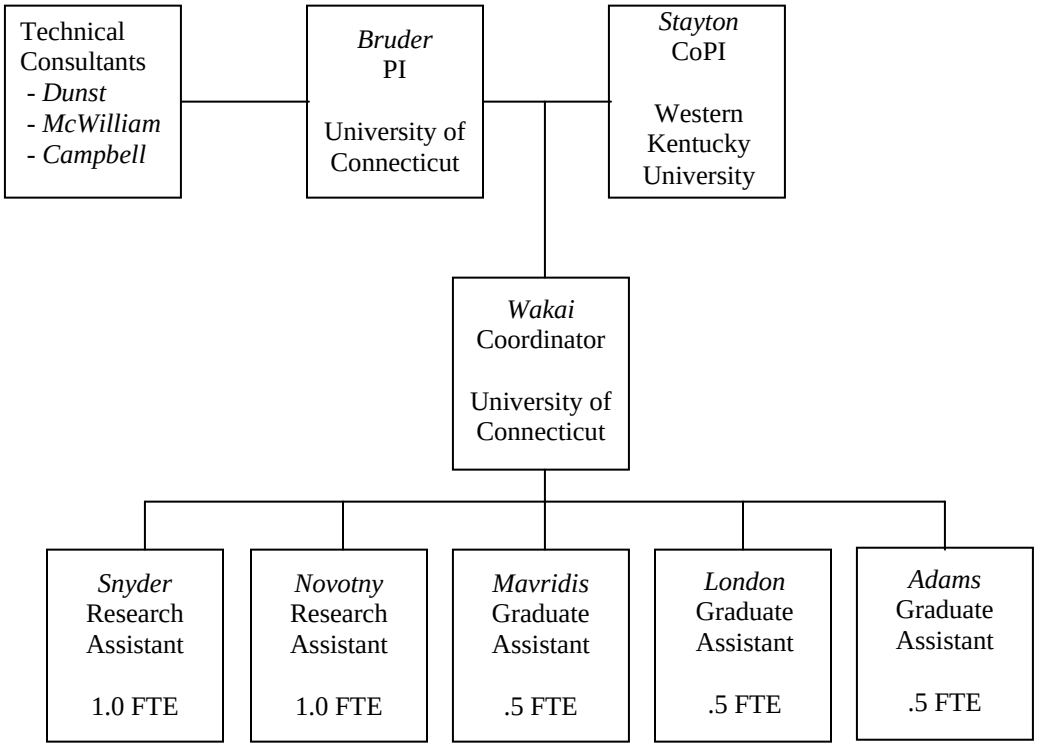
(c)(1) Develop and disseminate recommendations regarding policy and practice. On the basis of the review conducted under paragraph (a), and the results of the program designed and conducted under paragraph (b), the project must develop recommendations for policy and practice related to: meeting current and projected demand for qualified personnel; establishing quality licensure and certification standards and requirements; and providing effective training programs that produce highly qualified personnel to serve infants, toddlers, and preschoolers with disabilities.

The project must design and carry out dissemination activities in collaboration with others. Dissemination activities must incorporate the use of current communications technology. Collaborate with OSEP staff in strategic planning throughout the term of the project.

1.2. Center Infrastructure

The primary site of the project has been the University of Connecticut, under the direction of Mary Beth Bruder, Ph.D. During its first year, the project was co-directed by Vicki Stayton, Ph.D. at Western Kentucky University and Laurie Dinnebeil, Ph.D. at the University of Toledo. Dr. Dinnebeil resigned from her position with the project as of December 31, 2003, because of the demands of her academic position as program chair of special education at Toledo. Deborah Bubela, MS, PT, PCS, served as the project coordinator from the initiation of the project through September 2004, at which time Sara Wakai, Ph.D. assumed the role of project coordinator. Five research/graduate assistants were assigned to the project in Kentucky and Ohio during the first year of the project. Two research assistants and three graduate assistants are members of the University of Connecticut project staff. Please see the personnel chart for complete details (below).

Current Organizational Chart



1.3. Timeline

During **Year 1** the study(s) of personnel standards was conducted. The Center PIs developed the following survey instruments: *Part C Coordinator Survey* and *619 Coordinator Survey*. Center staff across the three sites recruited Part C and 619 coordinators in each state, distributed surveys and conducted phone surveys (based on the coordinators' choice of survey method). Center staff also compiled personnel standard information including electronic and paper documents relating to licensure, certification and training across all disciplines for Part C of IDEA (early intervention) and Section 619 of Part B of IDEA (early childhood special education). The staff began organizing this information into a format suitable for use in the database.

During **Year 2**, the study of Higher Education Preservice Programs was conducted. Center staff in all three sites compiled information on higher education programs representing all programs that prepare students to enter professions delivering services required under the Individuals with Disabilities Education Act (IDEA), Part C and 619. Contact information for program administrators was entered in a comprehensive database, the Higher Education Database, representing 5659 higher education programs. *The Higher Education Survey for Early Intervention (EI) and Early Childhood Special Education (ECSE) Personnel Preparation* was developed, piloted and revised. It was then sent to all 5659 programs via email with a letter explaining its purpose and use. There were several rounds of emails and phone calls to program contacts, the last being in October 2004, the last quarter of Year 2 of the project.

1.4. Budget

Following is a budget for Years 1, 2 and current carryover. Years 3-5 will be finalized after input on project studies from this review team.

	Year 1	Year 2	Amount of Carryover
Personnel	230,107	306,733	33,711
Supplies	6,359	7,712	10,596
Travel	9,000	10,000	14,743
Other	5,750	6,620	10,754
Contractual	31,000	75,000	93,621
Subcontractors	260,000	150,000	170,459
Equipment	3,000	3,000	1,666
Indirect Costs @ 8%	26,577	36,485	26,844
Total	1,167,343		362,394

SECTION 2: EVALUATION DATA

2.1. Description of the Evaluation Plan

Evaluation activities for the center occur at multiple levels and address four key issues: the center's progress in meeting its goals and objectives, the manner in which the center's research is conducted, the administration of the center, and the perceptions of the center's work by key participants and constituent groups.

Progress in accomplishing the center's goals and objectives. The center conducts careful and thorough planning of activities. At the beginning of each year, a detailed set of objectives for the year is specified, along with the activities to meet those objectives, target dates, and persons responsible for the accomplishment of each. Potential difficulties are discussed and preventive plans for dealing with those possibilities are identified.

The center's progress in meeting its objectives is communicated in a number of ways. First, biweekly meetings are held to review the progress at each site. Second, monthly

conference calls between the investigators occur to review the center's progress. Third, progress reports are posted on the project website. Fourth, progress is reported to the U.S. Department of Education through the regular reporting requirements, and weekly phone contact with the OSEP project officer.

Evaluation of the manner in which the research is conducted. The training of staff on specific protocols and for specific activities is carefully conducted. In all staff training, we rely on demonstration of actual performance of the skill rather than simply knowledge of how to do it. For example, training was conducted for all research assistants conducting phone interviews for both the certification study and higher education study in Year 1 and Year 2. Deb Bubela conducted the training, which included a review of the protocol and practice sessions during which research assistants conducted mock interviews. Biweekly conference calls were held across sites and research assistants during Year 1 and weekly meetings occurred between research assistants and graduate assistants during Year 2.

Several levels of evaluation were conducted to ensure accuracy of all research procedures. For each survey that has been used in the center's two studies, a protocol was developed that detailed the manner in which the data are to be collected. The protocol is reviewed with staff members during their training and is used in two ways. First, it functions as a self-monitoring mechanism for staff to complete as they collect the data on each measure. Second, project staff conduct random checks of 10% of all data to ensure maintenance of procedural reliability. Specific reliability procedures are determined for each individual study and are described in the individual data reports. All data collected and scored are checked by a second research staff member to ensure accuracy of scoring and transcribing of data. In addition, specially designed computer programs are used to check data and "flag" impossible entries.

Evaluation of key participants' perceptions of the center's work. Consumer satisfaction surveys will be used to seek information from stakeholders participating in the next round of studies. Study findings will be made available to families, providers, administrators, and other constituent groups through website updates. In addition, a log is maintained of the requests received by the center investigators for information related to our work. The entries in this log are categorized by dissemination audiences. The investigators review this information annually to determine whether we are communicating with all of the desired audiences.

2.2 Summary of Why Project Director(s) Believe the Project has been Significant and/or Effective

The project has completed the first two studies assigned through the cooperative agreement.

SECTION 3: ACTIVITIES AND ACCOMPLISHMENTS

3.1 Major Project Activities

The Center has been primarily involved in conducting research that provides a synthesis of the current state of EI and ECSE personnel preparation. **First**, research studies have been done at the state level to determine each state's personnel preparation practices and standards, supply and demand of personnel, and state coordinators' perceptions of factors influencing the availability of qualified personnel. These studies compiled comprehensive information from state-level system representatives relating to:

1) Part C and 619 systems' structure, service delivery and staffing in each state,
2) Personnel preparation opportunities for EI/ECSE professionals and para-professionals,
3) Standards and requirements for all service providers in EI and ECSE systems.

This study yielded a deeper understanding of each state's EI and ECSE system, and provided a foundation from which to compare elements of these systems among states. Data reports summarizing the results of these studies have been posted on the A.J. Pappanikou Center's website at http://www.uconnucedd.org/. *The National Landscape of Early Intervention in Personnel Preparation Standards under Part C of the Individuals with Disabilities Education Act (IDEA)* is attached in Appendix A, and *The National Landscape of Early Childhood Special Education Personnel Preparation Standards under 619 of the Individuals with Disabilities Education Act (IDEA)* is attached in Appendix B.

Along with survey data, personnel standards documents and electronic documents were obtained from each state. This information was reviewed and synthesized into concise Personnel Requirement Charts for each of the professions providing services required under IDEA. This extensive information was arranged into a format that provides uniformity by which to review and compare personnel requirements among disciplines and states. This information is currently available in an accessible electronic format at the following url: http://personnelstandards.uchc.edu. This database allows the user to access information about each state's personnel requirements for all professions providing services under IDEA. Information available in this database includes; educational requirements, certification source, examination requirements, practicum requirements, and sources of information.

Second, a higher education survey was designed and distributed by the center. To do this, an access database was developed containing information for 5659 higher education programs representing all services required under IDEA. The database contains information about the following program characteristics: institution name, type of program, size of institution, type of institution (as identified by Carnegie Code), name of program administrator,

contact information (address, phone, email), and all correspondence between project staff and potential respondents. Database information was obtained from a variety of resources including the Integrated Post-secondary Education Data System (IPEDS), the Princeton Review, individual school websites and national professional associations for respective professions.

The Higher Education Survey for Early Intervention (EI) and Early Childhood Special Education (ECSE)Personnel Preparation investigated how institutions of higher education prepare individuals who enter all disciplines represented in the EI and ECSE systems as requested in the RFP. This survey identified characteristics of higher education programs including: program goals, structure and support, recruitment strategies, instructional methods, experiential opportunities, alignment with standards and requirements, evaluation methods, and post-graduate involvement. This study is attached as a data report in Appendix C.

Third, the *Center to Inform Personnel Preparation* website has been available since March 2003 at the following url: http://www.uconnucedd.org/Projects/PersonnelPrep/Default.htm. Project data reports have been posted on the Center website as of February 2004. Between July 1, 2004 and the present time, the Center's directory has received a total of 1018 hits by 505 unique visitors with an average of 203.6 hits per month. The Center products have been accessed 170 times by 89 unique users.

Fourth, project staff have presented information about the project and research findings at the following conferences:

- Division of Early Childhood Annual International Conference on Young Children with Special Needs and Their Families - October, 2003
- Association of University Centers on Disabilities – November 2003
- Teacher Education Division of Council for Exceptional Children – November 2003

- OSEP Early Childhood National Conference – March 2004
- Association of University Centers on Disabilities – November 2004
- Teacher Education Division of Council for Exceptional Children – November 2004

3.2 Major Project Accomplishments

In an effort to briefly provide highlights from the studies, the following section contains responses to the RFP requirements.

(A) Collect a comprehensive review in the following subject areas:

(1) Licensing and Certification

Problem. The process of professional credentialing, and licensure is a crucial, yet neglected, system of quality assurance for state and national administrative bodies overseeing the education of our children. In the recent U.S. Department of Education report, *Meeting the Highly Qualified Challenge* (2003), Geiger, Crutchfield, & Mainzer report that there has been interest in the scholarly literature in professional licensure for students with disabilities for more than thirty years. Unfortunately, they state that current systems of licensure are outdated, incorporating low standards, and actually inhibit the admission of qualified candidates into the field. Recently there has been increased attention on the preparation of qualified personnel to meet higher standards of practice through the Center On Personnel Studies in Special Education (COPPSE), and the latest revision of IDEA.

Development of early childhood special education professional standards increased noticeably in the 1990's (Geiger, Crutchfield, & Mainzer, 2003). In 1991, only four states reported standards for personnel working with infants and toddlers with disabilities within any professional discipline (Bruder, Klosowski, & Daguio, 1991). As of five years ago, only 24

states reported no certification for early childhood special educators in the birth to three age range (Stayton & Bruder, 1999). While this was a substantive increase in credentialing standards, each state varied in its scope and practice. Additionally, states demonstrated preferences for non-categorical special education licenses, as well as special education licenses across broad age ranges, thus minimizing the number of personnel specifically trained and licensed for infants, toddlers and their families (Geiger, Crutchfield, & Mainzer, 2003). The Division for Early Childhood, Council for Exceptional Children (1997), has recommended against such certification, indicating it is difficult to prepare individuals to be skillful across a broad range of ages. As such, they have created personnel standards for individuals working with children birth to age eight and their families (DEC, 2000).

A variety of obstacles have been cited in the literature as preventing the uniform adoption of specific early childhood standards (Yates & Hains, 1997). There exists a tenuous interdependence between increasing the quantity of personnel credentialed to work with young children with disabilities and enhancing the quality and specificity of requirements for that credential (Bruder & Stayton, 1999; Bruder, Yate, & Hains, 1995). Unfortunately, the lack of specialized personnel standards effect not only the quality of personnel, but the content and methods used in personnel preparation programs that prepare personnel to meet state requirements.

What we did. The Center collected information about states' licensure and certification standards from multiple sources including state licensing agencies, electronic resources, and state coordinators (Part C, 619, and CSPD) through two surveys Part C and 619. The Center developed a format by which to organize the various data to allow comparison across disciplines and states in order to be responsive to the RFP. Using this format, staff created an accessible

electronic database for use by stakeholders (http://personnelstandards@uchc.edu). Information is provided on all professional disciplines providing services for young children as mandated by IDEA (both Part C and 619) in each state. Resources, including web links, are provided as a means of obtaining the most current information about each state's personnel requirements and standards. Summary information is in Appendix A and B in the form of data reports.

(1i) Motivations for change and resulting modifications in standards

(1ii) Impacts of standards and changes on personnel

Part C. Forty-five Part C coordinators responded to a series of questions to identify national trends focusing on changes to existing Part C personnel requirements. Our investigation found that over one-third (39.9%) of the states have or are in the process of **making modifications** in their requirements

For example, some states have increased the number of required in-service hours, developed more specific requirements, added competencies, or expanded requirements to include a greater number of professional categories who can provide early intervention. According to the respondents, **the impetus for making these changes was to improve the quality of service, to address personnel shortages, and to access the Medicaid program**.

Modifications have been in effect for a range of 3 months to 14 years and the process to implement the changes has taken 6 months to 13 years! Factors that helped to **facilitate** the process of standard modification included having a shared vision and end goal among stakeholders, a willingness to collaborate, and meetings with stakeholders. Respondents also identified **barriers** to implementing standard modification to include lack of funding to reimburse people for training, and an unwillingness to collaborate among stakeholders. Three-quarters (75%) of those responding affirmed that the changes have led or will lead to

improvement in the quality of personnel. In addition, over one-half (58.3%) of the respondents stated that the changes have increased, or have the potential to increase the number of EI personnel.

In addition, about one-half (51.1%) of the responding states have a**dded or created new professional categories** particularly at the paraprofessional level. These categories include EI assistant, EI associate, physical therapist assistant, and occupational therapist assistant. Some states created tiers within existing professional categories that require increasing amounts of qualifications with a corresponding increase in responsibilities. One state reported adding parent facilitator and language interpreter categories. These new categories were put into place to have more culturally competent staff, to provide services in a more natural environment through a consultative service delivery model, and to ensure that the full scope of professions have the knowledge, skills, and abilities to work with infants and toddlers with disabilities and their families.

According to the respondents, the new professional categories have been in effect for a range of 3 months to 10 years and the process to implement the categories took 6 months to 12 years. Factors that helped to **move the process** along included having strong commitment across agencies, obtaining funding, and developing partnerships with universities. Some of the states reported **barriers** such as lack of funding, and support. Many of the participating respondents felt that **the new professional categories have or will improve the number and quality of EI personnel**.

One-quarter of the responding states have **additional requirements or specific qualifications** beyond the licensure/certification for each EI professional discipline. Twenty-three states (51.1%) reported that they have or are in the process of developing a credential

specific to EI as a mechanism to modify existing standards (see Table 1). The most frequently cited procedures to obtaining a credential were competencies (72.7%), course work (45.5%), and pre-service preparation (40.9%). In addition, about one-quarter (22.2%) of these states offer **alternative methods to obtaining a credential** such as proficiency programs at universities, internships, or peer reviews.

Table 1. *Procedures for Qualifying for a Credential (n = 22)*

Procedures	Frequency	Percent
Competencies	16	72.7
Course Work	10	45.5
Pre-service Preparation	9	40.9
Exams	6	27.3
Training/In-service	6	27.3
Portfolio	5	22.7
Experience	4	18.2
Observation	2	9.1
Interview Process	2	9.1
Apprenticeship	1	4.5
Endorsement	1	4.5
Other-Unspecified	1	4.5

The specific credential requirements varied widely among states. Eleven of the twenty-three responding states require all providers to obtain the credential. Three states require only service coordinators to obtain the credential, and five require only special educators to be credentialed. Two states have developed credentialing for specialists, i.e. Infant Toddler Developmental Specialist in Florida and Family Support Specialist in Montana.

The states were motivated to require credentials as a way to improve the quality of early interventionists, to comply with state and federal regulations, and to provide a process for EI providers to be reimbursed by insurance companies. Based on data from the respondents, the

time an EI credential has been in effect ranged between 3 months and 14 years and took 6 months to 16 years to implement. The participating respondents identified several factors that helped to facilitate adopting an early intervention credential. Many respondents felt that cooperation and collaboration were essential and garnered support from local EI/ECSE programs, state professional organizations, agencies, and service providers. In addition, one state promoted the credential not as an exam but as a way to document service providers' skills and abilities in a rigorous but fair way.

Some respondents identified **barriers to implementing a credential** such as the logistics of developing a system and allocating staff to implement the credentialing process. Coordinating educational and training programs functioned as a barrier in several states. For example, one state reported having too few qualified faculty to prepare the personnel. Other states found it difficult to develop the appropriate in-service curriculum to link trainings to defined competency areas. In some states traveling to in-service training sites was difficult especially when teleconferencing was not available. In addition, some states reported a lack of commitment to obtaining a credential especially from service providers who have been in the field for years.

Of the 23 states reporting EI credentials, 18 coordinators (78.3%) indicated that they experienced or anticipated the credential contributing to improved quality of providers. Only about one-third (30.4%) reported increased quantity of providers associated with the credential. Two coordinators (8.7%) indicated decreased numbers of service providers following implementation of a credential.

619 Personnel Standards. Forty-eight 619 coordinators responded to the survey questionnaire on existing ECSE personnel requirements. The data indicate that over one-half (56.3 %) of the states have or are in the process of **making modifications in their personnel**

requirements. For example, some states have responded to the No Child Left Behind Act by requiring teachers to obtain an additional six hours in reading instruction. Other states have addressed licensure examination with a trend toward competency based assessment and an increase in requirements. Eight (16.7 %) of the respondents reported that their state had added or created new ECSE professional categories with examples being sign language interpreter, and learning consultant.

According to the respondents, some of the **reasons states have made these changes** is to prepare ECSE teachers to work in inclusive settings with children who have diverse abilities and needs, to broaden foundational education, and to bring national standards and early childhood standards into alignment. These modifications and categorical additions have been in effect for a range of 6 months to 24 years, with the implementation process taking 6 months to 18 years.

The respondents identified several **factors that positively influenced the implementation** of the new personnel requirements and categories. The primary facilitator for these changes was strong support from all ECSE stakeholder groups. For example, modifications and additions were expedited when there was strong state level lead agency support, collaborative higher education initiatives, and public awareness of needs. Other respondents identified the importance of persistent leadership and a shared common vision.

There were several **barriers that the respondents reportedly faced while implementing modifications and additions**. Time seemed to be the primary obstacle both in terms of the length of time it took to implement the changes as well as the increased demand on staff hours. The competition between priorities and funding were mentioned as barriers. Lack of collaboration among stakeholder groups and "territorial claims" impeded the modification process. Failure to reach consensus on strategies also led to delays. Other reported difficulties

related to higher education issues such as the lack of programs, and the shortage of faculty with the necessary expertise. Nearly three-quarters (73.7%) of the participating respondents stated that the changes have improved or have the potential to improve the quality of ECSE personnel but only 11.8% felt it would increase the number of ECSE personnel available. Over half (54.2%) of the respondents reported that their state also offers **alternative methods to obtaining a certification, license, or credential**. A small percent (12.5%) of the states have additional requirements or specific qualifications beyond the licensure/certification of ECSE personnel.

In reviewing responses from respondents and verifying the information with state boards, thirty (62.6%) states have or are in the process of developing **a credential specifically for ECSE personnel** with an emphasis on teacher certification. The credentialing process is primarily overseen by the state's Department of Education. Of those states reporting ECSE credentials, twenty-three states provided additional information regarding qualifying procedures. Over two-thirds reported that ECSE personnel may qualify for a state certificate with pre-service preparation (69.6%), or course work (65.2%) (see Table 2). In addition, almost half of the states responding award the credential based on competencies (43.5%), and exams (43.5%).

Table 2. *Procedures for Qualifying for a Credential (n = 23)*

Procedures	Frequency	Percent
Pre-service Preparation	16	69.6
Course Work	15	65.2
Competencies	10	43.5
Exams	10	43.5
Experience	1	4.3
Recommendations	1	4.3
Follow-up Mentoring	1	4.3

The vast majority of the respondents stated that **the motivation for implementing the ECSE state certification** was to improve the training and skill level of current and potential teachers who work with young children with disabilities. State credentials were also implemented as a response to needs identified by the field, including the demand for educators who have a broad educational foundation and are prepared to teach children in inclusive environments. Another motivating factor was the need to align state standards with national standards.

The amount of time the states' ECSE credentials have been in effect ranges from being newly implemented to 25 years (mean = 12.6) with the development process taking 2 to 15 years (mean = 6.4). When asked what helped to facilitate the implementation of the new ECSE certification, the respondents offered several explanations. For example, several respondents reported that state board prioritization and support was extremely important in promoting the credentialing process. In addition, institutions of higher education played a critical role in moving the ECSE credential forward. Strong leadership and interagency collaboration also assisted the credentialing process.

Respondents identified factors that acted as **barriers to developing and implementing the ECSE credential**. When there was lack of collaborative efforts and consensus, the process was hindered. Many respondents identified the lengthy time line as having a negative effect. For example, one respondent noted that it takes several years to develop university programs, obtain approval, and graduate students through the revised programs.

Half of the respondents reported that the state certification has or will improve the quality of ECSE personnel. About one-third (30%), of the respondents reported that the state certification would not contribute to personnel quality, and the remaining 20% of respondents

were unsure of the effect. One-third (33.3%) of the respondents felt the state certification has or will increase the number of qualified personnel. Another one-third (38.0%) of those responding were unsure of the effect of the state certification on ECSE personnel supply. Of the remaining respondents, equal numbers indicated that the certification would have no effect, or a detrimental effect.

(2) Preservice Personnel Preparation Programs

Problem. The first major examination of personnel preparation for those professionals providing services to infants and toddlers and their families was conducted under the auspices of a federally funded research institute on this topic (Bailey, Simeonsson, Yoder, & Huntington, 1990). The study examined a number of variables related to preservice preparation program curriculum for entry level students in eight disciplines: nursing, nutrition, occupational therapy, physical therapy, psychology, social work, special education, and speech language pathology. A telephone survey was conducted with 449 programs: 237 undergraduate programs and 212 master's programs. One major finding was that none of the disciplines felt they did an adequate job preparing professionals to work in early intervention. Other findings included a great variability both across and within disciplines in the amount of exposure provided to students in content related to infants, toddlers and families. The highest reported content area was atypical and typical development of infants (knowledge base) as opposed to clinical skills in assessment and intervention with both children and families. Bailey and his colleagues (1990) recommended a stronger emphasis and commitment be placed on both preservice and inservice models of personnel training for those serving infants, toddlers and their families.

In an effort to address the shortcomings in preservice personnel preparation, Bruder, Lippman, & Bologna (1994) completed a systems change program with 36 faculty from 15

universities in the New York metropolitan area, representing 12 disciplines. Through a leadership institute and intense on site mentorship, all 36 faculty had substantial impact on their university personnel training program in the areas of coursework and practica. This state specific project was followed up by the award of four regional institutes focused on higher education improvement for preparation programs for those disciplines providing Part C services (Hebbler, 1997; Winton, 1996).

Unfortunately, change in such higher education programs is slow and sometimes not sustainable (Rooney, 1995) because of a variety of factors including structural and organization issues, administrative issues, faculty issues, curriculum issues and student related issues (Early & Winton, 2001; Kilgo & Bruder, 1997; Klein & Gilkerson, 2000). It is therefore not surprising that practitioners and families alike report discrepancies between recommended practices in the field and actual service delivery practices (Bruder, 1999; Lava, Recchia, & Giovacco-Johnson, 2004; Odom, McLean, Johnson, & LaMontagne, 1995).

What we did. An access database was developed containing information for 5659 higher education programs representing all services required under IDEA. The database contains information about a number of program characteristics. Data base information was obtained from a variety of resources including the Integrated Post-secondary Education Data System (IPEDS), the Princeton Review, individual school websites and national professional associations for respective professions. These programs in this database were used as the sample for the second area of investigation for the center. *The Higher Education Survey for Early Intervention (EI) and Early Childhood Special Education (ECSE) Personnel Preparation* requested information on a large number of characteristics of higher education programs. Appendix C contains the full data report on these variables for over 1000 responding higher

education personnel training programs. Figure 1 contains a graph of the disciplines represented in the respondent pool.

(2i) Admissions criteria and recruitment

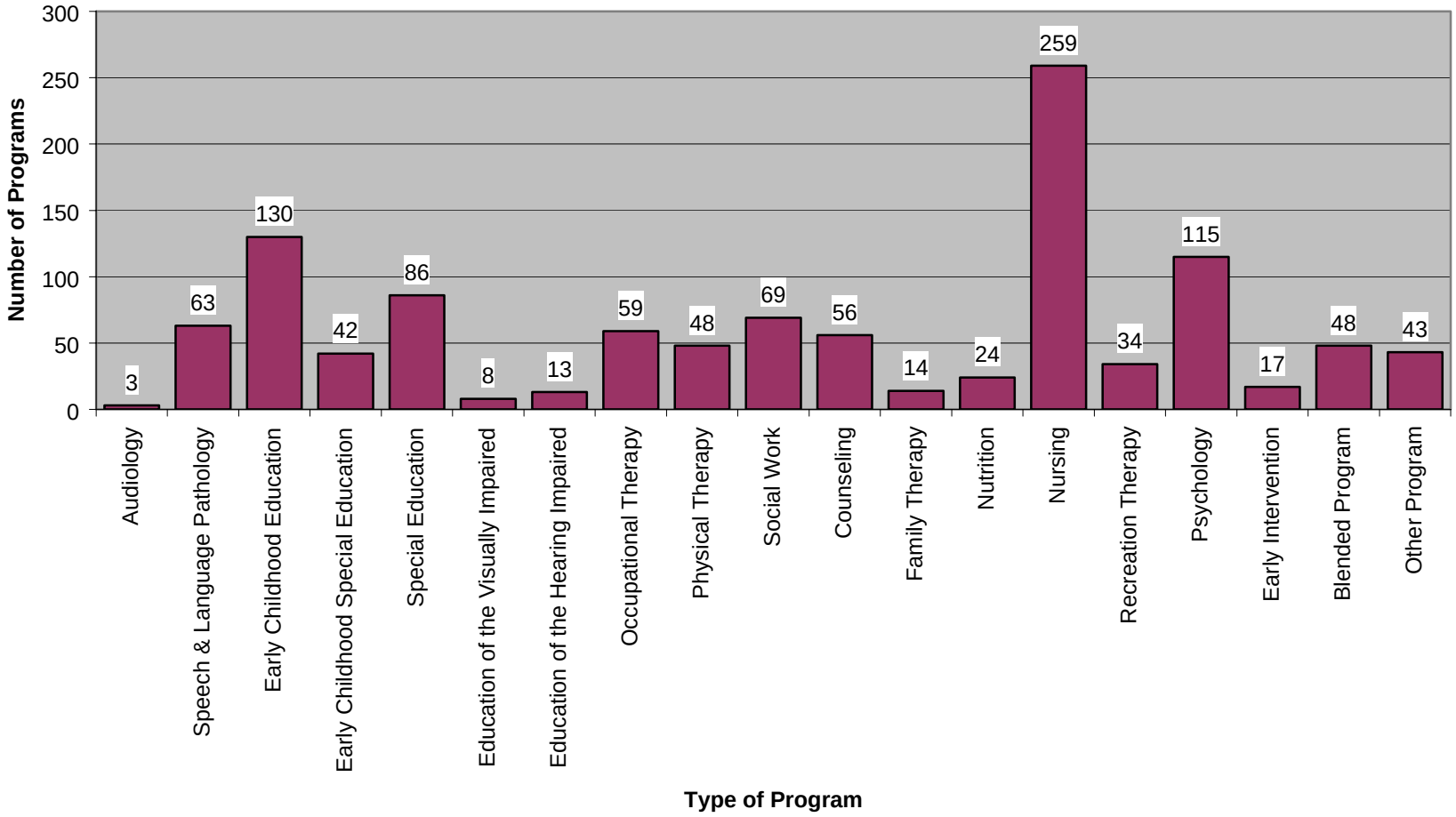
Respondents (n=1092) provided information on the various criteria used for student admission into their program. Grade Point Average was most commonly used to determine students' entry into the program, with 82.4% of programs identifying this as a criterion. Over half (50.9%) of those responding required a minimum GPA between 2.6 and 3.0. In addition, (16.5%) of the programs require a minimum GPA higher than 3.0. Other criteria used as part of admission requirements include recommendations/letters of reference (54.6%), statement of professional goals (43.9%), standardized test scores (42.6%), and writing samples (38.8%) (see Table 3).

Table 3. *Frequency and Percent of Programs Using Admission Criteria (n =1092)*

Admission Criteria	Frequency	Percent
GPA	932	82.4
Recommendation/reference letter	618	54.6
Statement of students professional goals	497	43.9
Standardized tests scores	482	42.6
Writing sample	439	38.8
Interview with student	345	30.5
Experience related to professional program	301	26.6
Preadmission portfolio	298	26.3
Speech/language assessment	83	7.3
Hearing screening test	24	2.1
Other	285	25.2

The survey requested information about **recruitment strategies** for the general student population and targeted audiences. Respondents reported using similar strategies for both groups

Figure 1
Number of Respondents by Higher Education Program (n=1131)



with the most frequently sighted being disseminating brochures and promotional materials, including information about the program in institutional sponsored recruitment activities, and hosting a website. Targeted recruitment efforts were consistently lower than general recruitment efforts (see Table 4). Respondents reporting targeted recruitment efforts, described that such efforts typically focused on various ethnic groups, professionals already practicing in the field, and students who have not yet declared a study area.

Table 4. *Frequency and Percent of Programs Using General and Targeted Recruitment Strategies*

Recruitment Strategies	General *(n=1101)*		Targeted *(n=884)*	
	Frequency	Percent	Frequency	Percent
Disseminate brochures or promotional materials to prospective students	967	87.8	622	70.4
Include information about program in institutional-sponsored recruitment activities	919	83.5	508	57.5
Host program website	821	74.6	468	52.9
Develop relationships with other institutions	700	63.6	454	51.4
Offer financial support	621	56.4	411	46.5
Conduct presentations to high school students	567	51.5	398	45.0
Exhibit posters at professional meetings	527	47.9	309	35.0
Develop relationships with districts or programs serving children and families	502	45.6	345	39.0
Maintain articulation agreement with 2-year programs	440	40.0	274	31.0
Other	185	16.8	124	

When respondents were asked to indicate the level of success in **recruiting students from underrepresented groups**, almost two-thirds (61.5%) of those responding felt they were

successful or somewhat successful. Ten percent (10.8%) of respondents reported being unsuccessful in their targeted recruitment efforts.

(2ii) Features of program

Based on the survey data, one-third (n=381; 34.1%) of the respondents represented undergraduate programs and over one-quarter (n=315; 28.2%) represented Masters programs. Some trends emerged when examining the data by type of program. For example, Counseling, Occupational Therapy, and Speech/Language Pathology tended to be Masters programs. Early Childhood Education and Nursing tended to be Associates and Undergraduate degrees. Physical Therapy programs are evenly split between Masters and Doctorate. Special Education and Early Childhood Special Education had both Undergraduate and Masters level programs (see data report in Appendix C).

About one-half (45.6%) of the programs **enrolled** less than 60 students during the 2003-2004 academic year. There were 756 respondents who provided information regarding the **number of faculty in their program**. Most (68.8%) programs had 4 to 11 FTE faculty. When examining the relationship between the number of FTE faculty and the number of students enrolled in the programs responding to the survey, an expected trend emerges. About one-third (38.1%) of the programs with small enrollment (1 to 29 students) have 2.5 or less FTE faculty. Mid-sized programs (60 to 149 students) reported having 4 to 11 FTE faculty. Larger programs (150 or more students) typically have FTE faculty of 11 or more.

On average, programs reported **5.87 tenure track** faculty and **3.09 non-tenure track** faculty. When examining the data by program, Audiology (11.00), Nursing (8.27), Family Therapy (7.71), and Social Work (7.63) have the largest average number of tenure track faculty. Education of the Hearing Impaired (1.65), Education of the Visually Impaired (2.57), and

Recreation Therapy (2.94) reported the lowest average number of tenure track faculty. Some programs reported large differences between the number of tenure and non-tenure track faculty. For example, Family Therapy has 7.71 tenure track faculty and 2.42 non-tenure track faculty, Counseling has a ratio of 4.66:.73, Psychology has a ratio of 6.66:1.73, and Social Work has a ratio of 7.63:2.01.

Respondents were asked to provide information about their **sources of funding support**. In the majority of the 945 programs for which this information was provided, the institution supplied the primary source of funding support for all program activities (i.e., advisory groups, clinical supervision, community service activities, curriculum materials and resources, instruction, professional development, program evaluation, recruitment materials, and student stipends or scholarships). State support was defined as those funds that were supplied outside of those already allocated through the institutions (i.e. state grants). The state most noticeably contributed (primarily, secondarily or minimally) to student scholarships or stipends in 39% of the cases. In other activities, state support was reported less than 22% of the time. Federal support occurred most frequently in conjunction with student scholarships or stipends, with 38.2% of programs reporting some degree of federal support (primary, secondary or minimal) in this area. Federal support was reported in 16.0% of the professional development activities. Examples of federal support sources included Bureau of Health Professions, Carl Perkins Funds, Child Bureau, Department of Education, Department of Health and Human Services-Tribal College Partnership Grant, Department of Labor, Maternal and Child Health, National Institutes of Health, Office of Special Education Programs, Pell Grants, and student loans.

Programs represented in the survey **addressed a variety of age ranges in their training emphasis**, with the majority (56.0%) taking a life span perspective. Ten percent of the programs

represented in the study focus on children between birth and eight years of age. Only 1.2% of the study sample specifically addresses birth to three and 1.4% of the sample specified the three to five year old age range. Respondents who selected "other" typically identified grade levels such as "K-12" or "PK-third grade" (Table 5.)

Table 5. *Frequency and Percent of Respondents by Age-Range the Program Addresses (n =1107)*

Age-ranges	Frequency	Percent
Lifespan	620	56.0
0-3 years	13	1.2
3-5 years	16	1.4
5-8 years	10	.9
0-5 years	43	3.9
0-8 years	111	10.0
0-21 years	80	7.2
3-21 years	33	3.0
5-21 years	62	5.6
Other	119	10.7

(2iii) Content features of programs

Respondents were asked how programs **delivered instruction about the principles of IDEA and Early Intervention/Early Childhood Special Education practices**. Principles/practices and instructional strategies were listed so that respondents could indicate the mode of instruction used to promote students' learning of the various topics. In total, 728 respondents answered some component of the question. The number and percent of programs indicating that they addressed a given topic are listed on the left column of Table 6. Child development was addressed most frequently by programs (96.6%) and "zero rejection" was addressed by the least number of programs (51.0%). Programs were asked to indicate the instructional strategies they used to address the various principles and practices. Class lecture is

clearly the primary instructional strategy used to convey information about principles and practices associated with IDEA. When examining topics covered in class lecture, programs indicated that child development was most commonly addressed (94.1%). Within lecture, zero-rejection policy (44.0%) and assistive technology (60%) were the least addressed issues. Other IDEA principles and practices that were addressed with relatively lower frequency included free appropriate education (62%) and natural environments (63.3%).

Programs reported using **field experiences most frequently** to address child-focused interventions (77.5%). Field-based activities provided a learning opportunity for students with respect to child development (76.4%) and cultural sensitivity (73.9%). Independent research was the method of instruction used **least frequently**, with a maximum of 31.7% of programs utilizing this strategy to promote students' learning of child development. Independent research was used with progressively less frequency for the various other principles and practices presented. Respondents were provided the opportunity to indicate if other instructional strategies were used in the program. While relatively few respondents (not more than 6.20%) indicated use of additional types of instruction, some of strategies they identified included additional readings, summer institutes, television, videotaped interventions, and online courses.

Table 6. *Percent and Frequency of Programs Addressing Principles and Practices of IDEA. (n=728)*

Principles and Practices	Independent Research %(Frequency)	Class Lecture %(Frequency)	In-Class Simulation %(Frequency)	Field %(Frequency)	Other %(Frequency)
Assessment models (n=638) 87.6%	20.7 (151)	83.1 (605)	51.0 (371)	68.1 (496)	4.67 (34)
Assistive technology (n=527) 72.4%	16.8 (122)	60.0 (437)	38.3 (279)	48.6 (354)	4.67 (34)
Child development (n=703) 96.6%	31.7 (231)	94.1 (685)	44.0 (320)	76.4 (556)	6.04 (44)
Child focused interventions (n=659) 90.5%	26.6 (194)	85.2 (620)	51.5 (375)	77.5 (564)	6.04 (44)
Cultural & linguistic sensitivity (n=665) 91.3%	25.1 (183)	88.6 (645)	46.6 (339)	73.9 (538)	4.26 (31)
Due process (n=580) 79.7%	12.4 (90)	75.8 (552)	20.5 (149)	35.3 (257)	3.16 (23)
Family-centered practices (n=654) 89.8%	22.9 (167)	86.8 (632)	46.3 (337)	70.9 (516)	5.22 (38)
Family involvement (n=669) 91.9%	21.7 (158)	87.8 (639)	43.7 (318)	73.4 (534)	6.20 (36)
Free Appropriate Public Education (n=489) 67.2%	12.8 (93)	62.0 (451)	17.2 (125)	35.3 (257)	3.57 (26)
IEP (n=552) 75.8%	13.9 (101)	71.0 (517)	35.9 (261)	54.5 (396)	4.53 (33)
IFSP (n=509) 69.9%	11.1 (81)	63.0 (459)	27.5 (200)	43.7 (318)	4.26 (31)
Instructional planning (n=531) 72.9%	19.5 (142)	66.5 (484)	41.9 (305)	57.8 (421)	4.12 (30)
Learning environments (n=577) 79.3%	19.4 (141)	73.1 (532)	40.0 (291)	62.0 (451)	4.67 (34)
Least Restrictive Environment (n=545) 74.9%	12.6 (92)	70.3 (512)	24.7 (180)	51.9 (378)	2.88 (21)
Multi-faceted assessment (n=546) 75.0%	17.9 (130)	71.6 (521)	40.5 (295)	54.8 (399)	3.85 (28)
Natural environments (n=507) 69.6%	14.7 (107)	63.3 (461)	25.8 (188)	52.5 (382)	4.26 (31)

Principles and Practices	Independent Research %(Frequency)	Class Lecture %(Frequency)	In-Class Simulation %(Frequency)	Field %(Frequency)	Other %(Frequency)
Professional and ethical practice (n=667) 91.6%	20.3 (148)	89.1 (649)	49.2 (358)	68.8 (501)	4.26 (31)
Teaming process (n=569) 78.2%	15.7 (114)	72.8 (530)	46.6 (339)	64.3 (468)	4.53 (33)
Zero reject (n=371) 51.0%	9.1 (66)	44.0 (320)	12.5 (91)	24.7 (180)	3.85 (28)

Another area of inquiry on the survey was the **relationship between state licensure and higher education offerings**. Of the 1085 respondents who provided information about licensure, 939 (86.4%) indicated that their program led to licensure or certification. When asked if the licensure was related specifically to EI/ECSE, 411 (38.3%) of the 1073 who responded to this question, said yes providing an affirmative response. Respondents were asked to identify the age range(s) for which licensure or certification applied. Of the 313 respondents to this question, 76.99% identified birth to five years, 72.20% identified three to five years, and 58.14% identified birth to three years.

The **alignment of programs with state license or certification standards** was assessed. Of the 1068 respondents who supplied this information, 912 (85.4%) indicated that their program was aligned with the state licensure or certification standards, and 76 (7.1%) reported they were not. The remaining respondents were unsure of the alignment or reported that alignment was not applicable. In addition, respondents (n=1079) gave information about alignment with national specialty professional standards. Nearly two-thirds (65.5%) of those responding noted that their program was aligned with standards.

With respect to **program accreditation**, 1044 respondents provided information. The vast majority (n = 927, 88.79%) reported that their programs were accredited, and a small

percent (n = 117, 11.21%) were not accredited. In addition, respondents were asked if their programs were pending any type of accreditation, with 100 (9.58%) responding affirmatively.

Respondents were asked if their programs anticipated any significant changes in the next three years. Out of the 1070 respondents who provided answers, 220 (20.56%) reported upcoming changes that included transition to more advanced degrees, restructuring to meet standards, curriculum modification, combining programs, increasing enrollment, and multiple retirements.

There were 723 respondents who provided information regarding participation in **collaborative activities** with the majority (55.0%) responding affirmatively. Programs collaborate through a variety of activities; with the most common being students taking courses with students from other disciplines (66.3%). A list of activities and the frequencies of programs using such collaborative measures is represented in Table 7.

When examining collaborative efforts by program, the data reveal some anticipated relationships. For example, two-thirds of the Education of the Hearing Impaired programs (66.6%, n=6) collaborate with Audiology. Similarly, two-thirds of the Occupational Therapy (65.3%, n=26) programs work with Physical Therapy programs and vice versa (68.4%, n=19).

Early Intervention programs are most likely to collaborate with other programs averaging 7.71 cross-disciplinary collaborations. They most frequently associate with Early Childhood Special Education (57.1%, n=7), Psychology (85.7%, n=7), and General Special Education (71.4%, n=7). Speech and Language Pathology programs also collaborate frequently with an average of 5.96 programs. Recreation Therapy programs have the lowest collaboration rate with 2.50 programs.

Table 7. *Frequency and Percent of Programs Participating in Cross-disciplinary Activities (n=394)*

Cross-disciplinary Features	Frequency	Percent
Courses are taken with students from different disciplines	263	66.8
Courses are offered and listed jointly across program areas within a college or school	154	39.1
Students enrolled in the program represent different disciplines	151	38.3
Courses are team taught by instructors from different disciplines or different programs	145	36.8
Students are placed in practicum setting outside of the program's discipline area	129	32.7
Students across disciplines complete field experiences together	125	31.7
Practicum experiences are supervised by faculty or personnel outside the disciplinary area of the program	110	27.9
The program's steering committee is comprised of individuals from multiple discipline	109	27.7
Courses are offered and listed jointly across programs across a college or school	104	26.4
Other	44	11.2

Programs are most likely to collaborate by allowing students from different disciplines to take courses together. The lone exception is nursing which may be due to the specific nature of the courses. In addition, several programs (most notably Early Intervention, Education of Hearing Impaired, Early Childhood Special Education, Education of Visually Impaired, etc.) have students who represent different disciplines enrolled in their programs. (See Appendix C.)

Respondents were asked to list **courses their programs offered with content specific to: Assistive Technology, Families, Inclusion/Natural Environments, Research and Evaluation and Team Process**. In addition, respondents were asked to indicate all age levels relevant to EI and ECSE (i.e. 0 to 3, 3 to 5, and 5 to 8) that the identified courses covered. Overall, the respondents most often reported that their programs offered at least one course

related to Families (86.43%) and Research and Evaluation (73.59%). On average, programs offer 2.15 courses on Families and 2.08 courses on Inclusion/Natural Environments. When examining the responses by age level, the data indicate that courses were most likely to focus on 5 to 8 year olds. Students were most likely to have an opportunity to take a course which exposed them to Assistive Technology for 5 to 8 year olds and Families for 3 to 5. Students were least likely to have a course offering that included content specific to Research and Evaluation for 0 to 3 year olds. When examining Research and Evaluation by degree level, students have considerable more opportunities to learn about this topic in graduate programs. The number of graduate courses offered on this topic is consistent with Assistive Technology, Inclusion/Natural Environments, and Team Process. Programs most likely to offer courses in these areas were Occupational Therapy (n=44) which had approximately 2.5 courses in each area and a total of almost twelve courses, Early Intervention (n=9) which had almost 2.5 courses in each area and a total of ten courses and Physical Therapy (n=32) which had about 2 courses in each area and a total of nine courses.

In the survey, **field experience**s were defined as "course practicum" in which field based instruction occurs as a component of a credit course and "practicum" which are independent, supervised, practical application of discipline content for credit. A total of 651 respondents provided specific information about the field experiences offered in their programs. The number of field experiences per program ranged from 1 to 10 with a mean of 3.7 field experiences per program. Respondents reported a total of 2,411 field experiences divided fairly equally between course practicum (48.32%) and practicum (47.08%) experiences. Required field experiences (86.77%) far out-number optional (5.27%). Most field experiences (71.01%) offer students opportunities to work with children who are with and without disabilities.

Field experiences most commonly provided students with the opportunity to interact with children between 5 and 21 years of age (66.94%), followed by 3-5 years of age (60.93%). Field experiences provided opportunities for students to interact with young children between birth and three in approximately one half (49.15%) of the reported experiences.

Respondents were asked to identify the **types of experiences** their programs used to provide students with opportunities to work with or learn about children between birth and five years of age. The results suggest that students are most likely to learn about this age group through service learning or other volunteer experiences (n=379, 67.2%). In addition, almost half of the respondents (n=266, 47.2%) noted that seminars and workshops were used to inform students.

Programs use a variety of criteria to **select field placements**, with geographic location being the most frequently selected determining factor (76.9%), followed closely by type of services provided (73.5%), and the licensure status of the cooperating professionals (73.4%) (see Table 8 for additional field site selection criteria). Faculty most commonly select the field placement for the student (64.5%), and most commonly supervise the students on their field experiences (77.9%).

(2iv) Composition of student population in programs

The survey requested information about the **demographic characteristics** of the students within programs. With respect to race and ethnicity, program composition varied from being comprised of 100% white students to being racially diverse. There are a few programs comprised entirely or nearly exclusively of persons from a single ethnic group. For example, Fort Belknap College is a two-year tribal college in Montana and reported that 100% of its

Table 8. *Frequency and Percent of Programs Using Field Site Selection Criteria (n =564)*

Field Site Criteria	Frequency	Percent
Geographic location of program	508	76.9
Type of services provided	486	73.5
Licensure status of cooperating professionals	485	73.4
Proximity of program to the institution	453	68.5
Demographic characteristics of students or clients served in field experiences	443	67.0
Program philosophy	422	63.8
Opportunities for students to work in team settings	389	58.9
Opportunities for students to work with families	384	58.1
Accreditation status of program	360	54.5
Other	97	14.7

students in the Early Childhood program are American Indian or Alaskan Native. Ten programs are comprised of 95% or more black students. Virginia Union University is an historically black university and its blended program is comprised entirely of black students. Five respondents report that their programs are comprised of 95% or more Hispanic students (Texas A. & M. International, Frostberg University, and Loredo Community College). The most prevalent Asian constituent is at the University of Hawaii, with the program being comprised of 84% Asian students. A comparison of means of the demographic data indicates that the majority of programs represented in the survey are comprised primarily of white students (see Table 9). It should be noted that these figures reflect national demographic trends for the general population.

Table 9. *Mean and Standard Deviation of Students Enrolled in Programs by Ethnic Group (n=1066)*

Ethnicity	Mean	Standard Deviation
White	77.03	24.43
Black or African American	9.78	15.24
Hispanic or Latino	6.37	12.20
Asian or Pacific Islander	3.35	7.64
American Indian or Alaskan Native	1.24	5.07

The survey also captured the prevalence of other demographic characteristics as represented in Table 10. The majority of students enrolled in the programs represented in the survey are female and have a permanent residence within 60 miles of the program they attend. Students registered as having a disability are represented in the programs with less frequency than in the general population.

Table 10. *Mean Percent of Demographic Characteristics.*

Demographic Characteristic	Mean %	Standard Deviation
Female *(n=1075)*	86.53	12.51
Permanent residence within 60 miles of institution *(n=1013)*	65.14	32.03
Non-traditional (24 years or older) *(n=1047)*	44.44	33.00
Part time *(n=1004)*	26.46	31.25
Possess emergency credential to teach/practice *(n=868)*	6.86	18.35
Registered as having a disability *(n=959)*	4.97	8.28
Non-resident *(n=661)*	2.28	5.15

(2v) Program evaluation

There were 723 programs that provided information about the methods they used to evaluate their program. Performance-based assessment is the most common approach to program evaluations (89.8%), followed by supervisors' evaluation of field experiences (77.6%), and results of licensure examination (72.6%). Table 11 lists frequencies and percents of additional components of program evaluation methods.

Table 11. *Frequency and Percent of Programs by Evaluation Method (n =723)*

Methods	Frequency	Percent
Performance-based assessment during program	649	89.8
Judgments from community constituents	488	67.5
Supervisor evaluation during field experience	561	77.6
Results from licensure exams	525	72.6
Student completion of exit requirements	511	70.7
Results of employer surveys	505	69.8
Structured follow-up interviews or questionnaires with graduates	444	61.4
Portfolio evaluation	375	51.9
State reports of graduates' induction year	104	14.4
Other	71	9.8

(2vi) Program completion and post-graduate activities

Based on information from 706 respondents, the vast majority of students find jobs in their respective fields. Percentages of programs in the sample that indicated students find jobs ranged from 81.9% for psychology to 100% for audiology with an average percent of 93.1%. However, respondents (n=612) reported that less than one-quarter (20.59%) of their students find jobs working primarily with children with special needs between the ages of birth and five years after completing the program. Graduates of Early Childhood Special Education (72.37%) and Early Intervention (50.33%) are most likely to go on to work with young children with special needs. The majority of the respondents (81.8%, n=554) indicated that students typically find employment within the region assigned to their institutions.

(3) Current and Projected Supply of and Demand for Personnel

States report data on supply and demand for personnel to OSEP for the annual report to Congress. These data are located at www.IDEADATA.org. The center investigated perceptions

of supply and demand for qualified personnel through the survey on licensure and certification. Both Part C and Part B coordinators overwhelmingly stated that there were shortages of personnel across all disciplines to provide services to infants, toddlers, preschoolers and families. These data are provided in the appendixed data reports.

The Part C and 619 coordinators were also asked to identify **facilitators and barriers for the hiring of qualified personnel**. The 619 coordinators (n=43) identified facilitators as including training (21%); availability of higher education programs (16%); and credentials (16%). Likewise the Part C coordinators (n-=36) identified facilitators as including specific recruitment efforts (27%); training (22%); and EI/ECSE characteristics (19%). Barriers to obtaining qualified personnel for Part C coordinators included the lack of a personnel pool (43%); and lack of knowledge of EI tasks (24%). The 619 coordinators identified barriers including salary/benefits (33%); higher education program issues (30%); lack of personnel pool (26%); state standards (17%).

(B) Identify gaps and design a program to address gaps

Problem. The data collected thus far suggest: 1) Part C and Part B coordinators report that more than 50% of their current workforce across disciplines is not adequate to meet the need to provide services under Part C and 619 of Part B of IDEA; 2) There is a lack of specificity in early intervention and early special education (including related services) personnel standards; 3) The majority of higher education programs for those in disciplines who provide early intervention and early childhood special education intervention services do not provide an emphasis on evidence based content related to this early age level.

What we propose to do. Our proposal for the next three years, therefore, addresses these gaps through a series of comparative and experimental studies under the overreaching theme of Quality Assurance of Personnel Competence. We propose to investigate the quality assurance mechanisms through the following research questions and methodologies:

I) National/State/Interdisciplinary Credential

1) What are the differences between state B-3 credentials on process, outcomes and cost: comparative case studies
2) Does a credential impact practitioner competence and child/family outcomes: (1) surveys; (2) group comparison between those who are credentialed and those who have not yet met credential criteria on variables of attitude, knowledge, skills and outcomes
3) Does a credential for service coordinators affect the quality of the coordination process and positively impact child and family outcomes: experimental comparison of those who receive training on an outcome based service coordination credential and those who provide service coordination without such a credential

II) Leadership Training at the Higher Education Level

1) What is the content, methods, faculty background and outcomes of Doctoral Leadership Programs that focus on specialization with children under 5 and those with a less specialized focus, across the disciplines under Part C and 619: comparative case studies

III) Practitioner Training and Support at the Inservice Level

1) What are the perceptions of EI/ECSE practitioners (across disciplines) on their preparation in evidence based practice, their current intervention practices on their job and their training preferences: national surveys
2) Are there state inservice and TA systems in EI/ECSE that meet evidence based standards for effective training, and have impact data on child/family outcomes: comparative case studies
3) What is the impact on child/family outcomes on different evidence based inservice delivery mechanisms: experimental intervention study

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Appendix A

THE CENTER TO INFORM PERSONNEL PREPARATION POLICY AND PRACTICE IN EARLY INTERVENTION AND EARLY CHILDHOOD SPECIAL EDUCATION

STUDY I DATA REPORT:
THE NATIONAL LANDSCAPE OF EARLY INTERVENTION IN PERSONNEL PREPARATION STANDARDS UNDER PART C OF THE INDIVIDUALS WITH DISABILITIES EDUCATION ACT (IDEA)

CDFA # 84.325J

Primary Site:

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THE CENTER TO INFORM PERSONNEL PREPARATION POLICY AND PRACTICE IN EARLY INTERVENTION AND EARLY CHILDHOOD SPECIAL EDUCATION

STUDY I DATA REPORT: THE NATIONAL LANDSCAPE OF EARLY INTERVENTION IN PERSONNEL PREPARATION STANDARDS UNDER PART C OF THE INDIVIDUALS WITH DISABILITIES EDUCATION ACT (IDEA)

Goals of the Center

The Center to Inform Personnel Preparation Policy and Practice in Early Intervention and Early Childhood Special Education (referred to hereafter as the Center) was established in January, 2003 as a five-year project funded by the Office of Special Education Programs. The Center represents the collaborative efforts of the University of Connecticut, Western Kentucky University and the University of Toledo. The purpose of the Center is to collect, synthesize and analyze data on: 1) the certification and licensure requirements for personnel working with infants, toddlers, and preschoolers who have special needs and their families; 2) the quality of training programs that prepare these professionals; and 3) the supply and demand of professionals representing all disciplines who provide both Early Intervention (EI) and Early Childhood Special Education (ECSE) services. This data will be utilized to identify critical gaps in current knowledge of personnel preparation programs. The center will disseminate recommendations for policy and practice related to personnel preparation at regional and national forums.

Purpose of the Report

This report focuses on data collected from the Part C Coordinator Survey during Study I: *The National Landscape of Early Intervention and Early Childhood Special Education*. The study was designed to obtain comprehensive information relating to:

1) Part C system structure, service delivery and staffing in each state and territory.
2) Personnel preparation opportunities for EI professionals and para-professionals.
3) Standards and requirements for all service providers in EI systems.

Methodology

Survey

The Part C Coordinator Survey consisted of 45 multiple-choice and open-ended questions grouped into five sections: 1) introductory questions about the CSPD coordinator and the Part C website; 2) background information about the state's Part C program (i.e. structure, funding, employment, and state requirements); 3) personnel requirements; 4) training information; and 5) the barriers and facilitators in obtaining appropriately qualified personnel (see Appendix A for a copy of the survey). Some of the multiple-choice questions required respondents to select only one response, while others allowed respondents to select all relevant answers. Respondents were offered an opportunity to provide additional comments to elaborate on the multiple-choice questions. The survey also asked open-ended questions which allowed respondents to give detailed responses on a specific topic in a less structured format.

Respondents

Part C coordinators (n = 53) from each state, District of Columbia, and the territories of Puerto Rico and the Virgin Islands comprised the targeted population for this study and were randomly assigned to one of the three collaborating research sites: University of Connecticut, Western Kentucky University and the University of Toledo (see Appendix B for site assignment by state). Part C coordinators or representatives (e.g. consultants, Comprehensive System of Personnel Development members) from 45 states completed the survey for a response rate of 84.9% (see Table 1). The amount of experience the respondents had in their current positions ranged from 2 weeks to 21 years with a mean of 5.69 years.

Table 1. *Number of Surveys Completed by Site (n = 45)*

	CT	KY	OH	Total
No. of States in Sample	19	16	18	53
No. of States Completing Survey	17	12	16	45
Response Rate	89.5%	75.0%	88.9%	84.9%

When a Part C coordinator was not able to provide any information needed, he/she was asked to obtain the necessary information from his/her colleague(s) or to make a referral to the person(s) who could best answer the question. Therefore, survey responses often represent collaborative efforts among Part C coordinators, Comprehensive System of Personnel Development (CSPD) coordinators and other system personnel.

Data Collection

The study used three methods of data collection:

1) Web-Based Searches: Project staff conducted electronic searches of the Part C program in each of their assigned states to serve as preparation for data collection and as supporting documents for future analysis.
2) Telephone Surveys: About half (48.9%) of the respondents opted to complete the survey via the telephone (see Table 2). The length of time to complete the telephone survey ranged from 60 to 120 minutes. Research staff made audio tapes and written records of all telephone survey responses. To ensure accuracy and reliability of the data collection, responses were verified by respondents before being entered into SPSS data files.
3) Electronic Surveys: About half (51.1%) of the respondents opted to participate in the study by completing the electronic version of the survey. Research staff e-mailed an electronic version of the survey directly to the respondent along with instructions for completing the survey. Follow-up telephone conversations occurred when clarification of responses was necessary.

Table 2. *Method of Survey Completion (n = 45)*

	Frequency	Percent
Electronic Survey	23	51.1
Telephone Survey	22	48.9
TOTAL	45	100.0

Fidelity Procedures

Several fidelity procedures were developed to ensure the consistency and accuracy of research implementation across sites and project staff. Prior to any data collection, the project coordinator developed written guidelines and organizational materials (i.e. protocols for conducting telephone surveys, recording data, and compiling information) which were distributed and explained to all research assistants.

All staff were instructed on the proper interview protocol. Five interview training sessions were conducted via conference call with available staff. Following the training interviews, project staff were given the opportunity to clarify protocol as it related to various scenarios. The training interviews and subsequent discussions were tape recorded to allow any staff member not in attendance the opportunity to benefit from the training.

As part of ongoing reliability procedures project co-directors and coordinators at each site reviewed interview tapes and provided feedback to interviewers. In addition, one-hour weekly conference calls were conducted during the five month data collection process to clarify questions that emerged during interviews. The data collection forms for telephone surveys were returned to respondents allowing them to verify the accuracy of the recorded responses. Staff at each of the three research sites reviewed 20% of all telephone survey tape recordings for accuracy of data interpretation and data entry. An inter-rater reliability of 86.3% was obtained.

All data (i.e. responses from telephone surveys, electronic surveys, tape-recordings of telephone surveys and data collection sheets) were sent to the University of Connecticut. Project staff at the University of Connecticut reviewed each survey to ensure accuracy and thoroughness of responses as well as inter-site reliability. All data were entered into an Access data file and quantitative responses then were entered into SPSS. Data entry monitoring was conducted on 100% of the data.

Data Analysis

Both formats (electronic and telephone) of the survey contained the same questions and the results from the two data collection methods were analyzed in aggregate (see Appendix C for a list of states represented in data analysis). Descriptive statistics (means, frequencies, and percentages) were calculated for the quantitative variables. Research staff analyzed the qualitative responses to identify salient themes. Each response then was coded to consensus based on the themes.

Results

The findings were grouped into the following topics: 1) introductory questions; 2) ways Part C is mandated; 3) organizational structure of states' Part C program; 4) personnel issues; and 5) factors that influence obtaining appropriately qualified personnel.

Introductory Questions

Because the study used the states' Part C website as a resource, the researchers asked respondents if the information on their website was current and accurate. Almost three-quarters (71.1%) of the respondents stated that their state's website was current and accurate while 13.3% of the respondents reported that their website might not be current nor accurate. Four (8.9%) of the responding states do not have a Part C web site. The respondents stated that their websites were updated on a frequent (28.9%) or an as needed basis (24.4%). The vast majority (84.4%) of the respondents stated that their lead agency or department was the entity responsible for implementing the updates.

Ways Part C Is Mandated

With respect to how Part C services are mandated, Part C services in 64.4% of the reporting states are legislated and 22.2% are delivered per executive order of the governor. An additional 2.2% are legislated and executive order. Other mandates were mentioned in 11.0% of responses, consisting of memorandum of understanding, budget line items, and administrative rule (see Table 3).

Table 3. *State Level Part C Mandate (n = 45)*

	Frequency	Percent
Legislated	29	64.4
Executive Order From Governor	10	22.2
Line-Item on The Governor's Budget	2	4.4
Administrative Rule –Guidelines to Implement It	2	4.4
Memorandum of Understanding Between State Agencies	1	2.2
Legislated and Executive Order from Governor	1	2.2
TOTAL	45	100.0

Organizational Structure of State's Part C Program

The respondents identified 21 different agencies that headed Part C systems across the country. The Department of Education was the lead agency for nearly a quarter (22.2%) of the Part C systems. Another 20% of Part C systems functioned under the Department of Health. One state's Part C system was reported being housed under

both the Department of Education and the Department of Health. Four (8.9%) state's Part C systems functioned under the Department of Human Services (see Table 4).

Table 4. *Lead Agency for Part C System (n = 45)*

Lead Agency	Frequency of States	Percent of States
Department of Education	10	22.2
Department of Health	9	20.0
Department of Human Services	4	8.9
Department of Health and Social Services	2	4.4
Department of Human Resources	2	4.4
Department of Health and Human Services	2	4.4
Co leads: Department of Education and Department of Health	1	2.2
Department of Mental Retardation	1	2.2
Department of Rehabilitation Services	1	2.2
Department of Economic Security	1	2.2
Department of Health and Welfare	1	2.2
The Family and Social Services Administration	1	2.2
Department of Public Health and Environment	1	2.2
Department of Public Health and Human Services	1	2.2
Department of Public Welfare	1	2.2
The Interagency Council on ECI	1	2.2
Department of Mental Health, Mental Retardation and Substance Abuse Services	1	2.2
Department of Health and Family Services	1	2.2
Cabinet for Health Services	1	2.2
Department of Developmental Services	1	2.2
Department of Health and Senior Services	1	2.2
Department of Health and Human Resources	1	2.2
TOTAL	45	100.0

The participating Part C respondents stated that their current lead agency had consistently served in that capacity in nearly three-quarters (73.3%) of the cases. Nearly two-thirds (64.5%) of the respondents perceived their Part C organizational structure as being stable, or very stable. Additional respondents stated that their organizational structure was fairly stable (13.3%), or that stability within their organizational structure was emerging (6.7%). However, 6.7% of the respondents mentioned that the stability of their organizations was threatened, and an additional respondent (2.2%) perceived his/her state's Part C organizational structure as being unstable.

While over half (53.3%) of the respondents stated that there were no threats to their state's Part C organizational system, almost one-third (31.1%) of the respondents identified funding issues as a threat. Other threats that were mentioned (totaling 13.2%) included: reorganization within the existing agency, a new lead agency, and lack of internal support for Part C program.

Part C respondents in this study reported receiving funding from multiple sources. All (100%) of the respondents receive federal funds and almost all (95.6%) receive state funds. Over three-quarters (77.8%) of the respondents receive Medicaid funds. Part C programs also received funds from private insurance (55.6%), local sources (33.3%), parent/family contributions (22.2%), grants (11.1%), private charitable contributions (11.1%), and national organizations/associations (4.4%) (see Table 5).

Over one-third (37.8%) of the respondents stated that their funding was stable. However, additional respondents tempered their view of having a stable funding source with caveats such as having insufficient funds (13.3%), anticipating issues (11.1%), and having stability only in some areas (2.2%). Over a quarter (26.7%) of the respondents stated that their funding was not stable.

Table 5. *Funding Sources for Part C Programs (n = 45)*

	Frequency	Percent
Federal	45	100.0
State	43	95.6
Medicaid	35	77.8
Private Insurance	25	55.6
Local	15	33.3
Parent/Family Contributions	10	22.2
Grants	5	11.1
Private Charitable Contributions	5	11.1
National Organizations/ Associations	2	4.4

Respondents were asked how the Part C system was organized in their state and were permitted to select all the options that applied. The findings indicate that Part C service delivery is structured differently across the country and is frequently housed under more than one organization. Over one-third (37.8%) of the states reported that services were administered through a regional office, 20.0% reported that services were provided through county offices, 11.1% reported that services were administered through

a central office, and 11.1% reported that services were directed through local interagency coordinating councils (LICC's). Forty percent of the respondents identified other organizations within the Part C structure including school systems, health departments, or local lead agencies (see Table 6).

Table 6. *Organizational Structure of Part C Programs (n = 45)*

	Frequency	Percent
Regional Office	17	37.8
County	9	20.0
Central Office	5	11.1
LICC's	5	11.1
Other	18	40.0

Personnel Issues

The survey sought to illuminate the current status of Part C systems' personnel supply, training, and standards of EI. The survey asked a series of questions to address these issues. Below is a description of the findings.

Types of Service Provider Employers

Respondents reported that the EI system in their states had an average of 3.5 types of employers. Personnel are most frequently employed by private not for profit agencies (80.0%) followed by a State Department (68.9%). Other employers included private for profit agencies (55.6%), private individual therapists (53.3%), local education agencies (37.8%), and regional collaborative units (31.1%) (see Table 7). Some Part C personnel are unionized in about one-third (31.1%) of the states and in 48.9% of the states they are not.

Table 7. *Types of Part C Employers (n = 45)*

	Frequency	Percent
Private Not For Profit Agency	36	80.0
State Department	31	68.9
Private For Profit Agency	25	55.6
Private Individual Therapist	24	53.3
Local Education Agency	17	37.8
Regional Collaborative Units	14	31.1
Other	11	24.4

Personnel Supply

Respondents were asked to indicate whether their state had adequate numbers of personnel across the various disciplines in Early Intervention (see Table 8). Over half of the states reported having an adequate supply of social workers (62.2%), service coordinators (53.3%), pediatricians and other physicians (53.3%), and nurses (51.1%). Respondents also identified disciplines with statewide or localized personnel shortages. Speech/language pathologists were the most frequently reported shortage with 75.5% of the states reporting this finding. Other disciplines with considerable percentages of respondents reporting shortages included occupational therapists (51.1%), physical therapists (46.7%), and special educators (40.0%). A substantial number of respondents were unsure about the adequacy of the personnel supply in their respective states particularly for nutritionists (31.1%), orientation/mobility specialists (31.1%), and family therapists (28.9%). Reporting on specific personnel supply numbers is complicated for many Part C coordinators particularly when only 35.6% of the participating states have an updated Part C personnel database.

Table 8. *Percent of States Reporting Adequacy of Part C Personnel Supply (n = 45)*

Discipline	*Adequacy of Personnel Supply*	*Shortage of Personnel Supply*	*Unsure of Personnel Supply*
Social Workers	*62.2*	*17.8*	*17.8*
Service Coordinators	*53.3*	*33.3*	*6.7*
Pediatricians and Other Physicians	*53.3*	*24.5*	*20.0*
Nurses	*51.1*	*22.2*	*22.2*
Psychologists	*48.9*	*35.5*	*13.3*
Audiologists	*46.7*	*33.3*	*17.8*
Special Educators	*44.4*	*40.0*	*11.1*
Physical therapists	*40.0*	*46.7*	*11.1*
Nutritionists	*40.0*	*26.6*	*31.1*
Occupational Therapists	*37.8*	*51.1*	*8.9*
Orientation/Mobility Specialists	*35.6*	*31.1*	*31.1*
Family Therapists	*33.3*	*31.1*	*28.9*
Speech/Language Pathologists	*13.3*	*75.5*	*8.9*

Personnel Training

Respondents were asked if the EI personnel in their state were appropriately trained to work with young children and their families. The percent of respondents indicating that the EI professionals in their state were adequately trained varied by discipline (see Table 9). Almost half of the respondents reported having adequately trained audiologists (46.7%), and special educators (44.4%). However, the respondents expressed concern about personnel in each professional discipline being appropriately trained particularly pediatricians and other physicians (33.3%), service coordinators (24.4%), and psychologists (22.2%). In the section of the question that allowed for additional comments, respondents noted that Part C personnel in their states needed

further training to work specifically with infants and toddlers with disabilities and their families. The need for additional training in EI was most frequently mentioned for speech/language pathologists (24.4%), physical therapists (24.4%), and occupational therapists (22.2%). A large percent of respondents stated they were unsure whether the EI personnel in their states were appropriately trained, particularly for the disciplines of orientation/mobility specialists (35.6%), family therapists (33.3%), and social workers (28.9%).

Table 9. *Percent of States Reporting Adequacy of Training of Part C Personnel (n = 45)*

Disciplines	*Percent of Responses for Number of Providers*			
	Adequately Trained	*Not Adequately Trained*	*Need Additional Training in EI*	*Unsure*
Audiologists	*46.7*	*13.3*	*17.8*	*20.0*
Special educators	*44.4*	*15.5*	*17.8*	*17.8*
Occupational therapists	*42.2*	*13.3*	*22.2*	*20.0*
Nutritionists	*42.2*	*8.9*	*15.5*	*31.1*
Physical therapists	*40.0*	*15.5*	*24.4*	*17.8*
Nurses	*40.0*	*15.5*	*17.8*	*22.2*
Service coordinators	*40.0*	*24.4*	*11.1*	*17.8*
Speech/language pathologists	*37.8*	*17.8*	*24.4*	*17.8*
Orientation/mobility Specialists	*35.6*	*13.3*	*13.3*	*35.6*
Social workers	*35.6*	*15.5*	*17.8*	*28.9*
Psychologists	*33.3*	*22.2*	*17.8*	*24.4*
Pediatricians and other physicians	*28.9*	*33.3*	*17.8*	*17.8*
Family therapists	*28.9*	*13.3*	*17.8*	*33.3*

Interagency Collaboration

According to the participating Part C respondents, states used several avenues to address personnel preparation. The most frequently cited method was through State Improvement Plans (SIPs) which was mentioned in 73.3% of the cases (see Table 10). In addition, Part C respondents in 53.3% of the states reported the presence of an interagency agreement with 619 that addressed personnel preparation. Of the responding states, 2.2% had an expired interagency agreement, and 22.2% had the Department of Education as the Part C's lead agency, thus eliminating the need for an interagency agreement. Over half (57.8%) of the Part C respondents reported that their state's Interagency Coordinating Council (ICC) had a personnel preparation committee. Based on the qualitative responses from the respondents, state's ICC's developed personnel preparation initiatives which included topics such as:

- Development of standards, state improvement recruitment plan, credential, core competencies, in-service and pre-service strategies.
- Revision of certification.
- State training.

Part C respondents stated that their (CSPD) addressed EI personnel preparation through various activities including in-service training, developing credentials, and linking with institutions of higher education. Over one-half (51.1%) of the Part C respondents, reported that their state's CSPD had a written document describing in-service training opportunities, and 37.8% of the Part C respondents reported that their state had a pre-service training document.

Table 10. *Methods of Addressing EI in Personnel Preparation (n = 45)*

	Percent of States Responding			
Method	Yes	No	Unsure	Indirectly
State Improvement Plan	73.3	22.2	0.0	4.4
ICC Personnel Prep Committee	57.8	40.0	2.2	NA
Interagency Agreement	53.3	20.0	2.2	NA
CSPD Document for In-Service	51.1	44.4	4.4	NA
CSPD Document for Pre-Service	37.8	46.7	15.6	NA

Modifications to Part C Personnel Requirements and Additions to Professional Categories

The respondents were asked a series of questions to identify national trends focusing on changes to existing Part C personnel requirements. The study found that over one-third (39.9%) of the states have or are in the process of making such modifications (see Table 11). For example, some states have increased the number of required in-service hours, developed more specific requirements, added competencies, or expanded requirements to include a greater number of professional categories. According to the respondents, the impetus for making these changes was to improve the quality of service, to address personnel shortages, and to access the Medicaid program.

The modifications have been in effect for 3 months to 14 years and the process to implement the changes took 6 months to 13 years. Factors that helped to facilitate the process included having a shared vision and end goal, a willingness to collaborate, and meeting with constituents. Respondents also identified barriers to implementing these changes such as lacking the additional funding to reimburse people for training, and having to encourage others to collaborate. Three-quarters (75%) of those responding affirmed that the changes have led or will lead to improvement in the quality of personnel. In addition, over one-half (58.3%) of the respondents stated that the changes have increased or have the potential to increase the number of EI personnel.

In addition, about one-half (51.1%) of the participating states have added or created new professional categories particularly at the paraprofessional level such as EI assistant, EI associate, physical therapist assistant, and occupational therapist assistant. Some states created tiers within existing professional categories that require increasing amounts of qualifications with a corresponding increase in responsibilities. One state reported adding parent facilitator and language interpreter categories. These new categories were put into place to have more culturally competent staff, to provide services in a more natural environment through a consultative service delivery model, and to ensure that the full scope of professions have the knowledge, skills, and abilities to work with infants and toddlers with disabilities and their families.

According to the respondents, the new professional categories have been in effect for 3 months to 10 years and the process to implement the categories took 6 months to 12 years. Factors that helped to move the process along included having strong commitment across agencies, obtaining funding, and developing partnerships with universities. Some of the states reported barriers such as lack of funding, and support. Many of the participating respondents felt that the new professional categories have or will improve the number and quality of EI personnel.

Table 11. *Percent of States Reporting Changes in Personnel Requirements (n = 45)*

Changes	*Yes or In Process*	*No*	*Unsure*
Modifications to Existing Requirements	*39.9*	*57.8*	*2.2*
Additional Professional Categories	*51.1*	*46.7*	*2.2*

State Credential Specific to EI Professionals

Twenty-three (51.1%) states reported that they have or are in the process of developing a credential specific to EI (see Table 12). The most frequently cited procedures to obtaining a credential were competencies (72.7%), course work (45.5%), and pre-service preparation (40.9%). In addition, about one-quarter (22.2%) of the states offer alternative methods to obtaining a certification, license, or credential such as proficiency programs at universities, internships, or peer review (see Table 13). About one-quarter (25.0%) of the participating states have additional requirements or specific qualifications beyond the licensure/certification of each EI professional discipline.

Table 12. *Procedures for Qualifying for a Credential (n = 22)*

Procedures	Frequency	Percent
Competencies	16	72.7
Course Work	10	45.5
Pre-service Preparation	9	40.9
Exams	6	27.3
Training/In-service	6	27.3
Portfolio	5	22.7
Experience	4	18.2
Observation	2	9.1
Interview Process	2	9.1
Apprenticeship	1	4.5
Endorsement	1	4.5
Other-Unspecified	1	4.5

Table 13. *Percent of States Using Alternative Methods and Additional Requirements for EI Certification*

	Yes	No	In Process	Unsure
Alternative Methods to Certification, Licensure, and Credential (n = 45)	22.2	75.6	2.2	0.0
Additional Requirements or Specific Qualifications (n = 44)	25.0	72.7	0.0	2.3

The states were motivated to require the credentials as a way to improve the quality of early interventionists, to comply with state and federal regulations, and to provide a process for EI providers to be reimbursed by insurance companies. Based on data from the respondents, an EI credential has been in effect between 3 months and 14 years and took 6 months to 16 years to implement. The participating respondents identified several factors that helped to facilitate adopting the credentials. Many respondents felt that cooperation and collaboration were essential and garnered support from local EI/ECSE programs, state professional organizations, agencies, and service providers. In addition, one state promoted the credential not as an exam but as a way to document service providers' skills and abilities in a rigorous but fair way. Some respondents identified barriers such as the logistics of developing a system and allocating staff to implement the credentialing process. Coordinating educational and training programs functioned as a barrier in several states. For example, one state reported having too few qualified faculty to prepare the personnel. Other states found it difficult to develop the appropriate in-service curriculum to link trainings to defined competency areas. In some states traveling to in-service training sites was difficult especially when teleconferencing was not available. In addition, some states reported a lack of commitment to obtaining a credential especially from service providers who have been in the field for years. About one-half (47.8%) of the respondents stated that the credential led to an increase in the quality of EI personnel but only one-third (30.4%) reported that there was a positive effect on the number of EI personnel.

State Training Requirements and Information for EI Professionals

According to the participating Part C representatives, most states have implemented requirements to prepare professionals in EI (see Table 14). About half (53.3%) of the participating states require specific training for EI professionals before they begin employment and almost three-quarters (73.3%) of the states require training for EI professionals during employment. In addition, one-third (33.3%) of the states require employees to obtain Continuing Educational Units (CEU's) related to the EI field.

Table 14. *Percent of States Reporting Training Requirements, Information, and Opportunities for EI Professionals (n = 45)*

Element of Training	Yes	No	In Process	Unsure
Training as Part of Personnel Requirements				
Training Required for EI Professionals During Employment	73.3	26.7	0.0	0.0
Training Required for EI Professionals Before Employment	53.3	46.7	0.0	0.0
Required CEU's Specific to EI	33.3	66.7	0.0	0.0

Training Information				
Directory of In-Service Training Opportunities	64.4	33.3	0.0	2.2
Directory of EI Higher Education Programs	35.6	60.0	0.0	4.4
Training Opportunities				
EI Higher Education Programs	57.8	37.8	0.0	4.4
Higher Education Consortium	53.3	26.7	0.0	20.0
Other Agencies that Provide EI Training	62.2	22.2	0.0	2.2
Career Ladder within EI Structure				
Career Ladder for EI Providers	17.8	77.8	2.2	2.2

The personnel requirements have contributed to the development of training opportunities. Over half (57.8%) of the participating states have higher education programs that are designed specifically to prepare professionals to work in the field of EI. Almost two-thirds (62.2%) of the participating states have additional agencies that provide EI training. Over half (53.3%) of the participating states have a higher education consortium.

Personnel interested in in-service training opportunities are able to refer to a directory in 64.4% of the responding states. However, accessing information on EI higher education programs appears to be difficult in many states since only 35.6% reported having a directory of such programs.

Although states have developed training requirements and opportunities, they have been slow to create an avenue for EI providers to advance within the EI system based on training and performance. We asked the participating Part C respondents if there was a career ladder for EI providers in their state. Less than one-fifth (17.8%) of the Part C respondents reported the existence of such a path to recognize advancement within the field.

Obtaining Qualified Personnel in EI

At the close of the survey, respondents were given the opportunity to reflect on their experiences in the field and to describe aspects they believed facilitated and/or hindered obtaining personnel who are appropriately qualified to deliver Part C services. Their responses were coded into salient themes and are discussed below.

Facilitators

The researchers developed 14 themes based on responses regarding facilitators in obtaining qualified personnel (see Table 15). The respondents most frequently cited specific recruitment efforts (27.8%) including the use of national associations, collaboration with graduate programs, and posting on state websites.

Almost a quarter (22.2%) of the respondents identified training as an important tool in obtaining EI personnel. For example, in one state individuals who lack academic training but have strong work skills and experience were able to obtain a technical-professional licensure through the Department of Education.

Respondents in 19.4% of the states reported that fundamental characteristics of EI attracted many professionals to the field. These characteristics included planning and working as a team, interacting with service coordinators and providers, and flexible hours.

The respondents passionately described how people who are drawn to working with infants, toddlers and their families share a family-oriented philosophy. This philosophy was perceived as a facilitator to obtaining qualified personnel for 19.4% of the respondents.

Table 15. *Facilitators to Obtaining Qualified Personnel in EI (n = 36)*

Facilitators	Frequency	Percent
Specific Recruitment Efforts	10	27.8
Training	8	22.2
Characteristics of EI/ECSE	7	19.4
Family-Oriented Philosophy	7	19.4
Geographic Issues/ Attractive Location	6	16.7
Higher Education Programs Adequately Preparing	6	16.7
Salary/Benefits	5	13.9
Interagency Initiatives	5	13.9
Certification	5	13.9
Grants/Funding Programs	5	13.9
Positive Perceptions of EI/ECSE	3	8.3
System Level Financial Reimbursement	2	5.6
Supervision	2	5.6
Other	1	2.8

Barriers

Almost half (42.9%) of the respondents stated that a primary barrier was simply the lack of a qualified pool of prospective personnel (see Table 16). Even national recruitment efforts were viewed as ineffective by most of the respondents because there are so few individuals with the education and experience in providing services to young children with disabilities and their families.

Table 16. *Barriers to Obtaining Qualified Personnel in EI (n = 42)*

Barriers	Frequency	Percent
Lack of Personnel Pool	18	42.9
Higher Education Program Issues	15	35.7
Salary/Benefits	15	35.7
Geographic Issues (Rural)	13	31.0
Lack of Knowledge About EI/ECSE	10	23.8
Negative Perceptions of EI/ECSE	10	23.8
Characteristics of EI/ECSE Tasks	8	19.0
Training Issues	7	16.7
System Level Financial Reimbursement	2	4.8
State Standards/Certification/Credential	2	4.8
Lack of Interagency Collaboration	1	2.4
Other	1	2.4

Another barrier, reported by 35.7% of the respondents, focused on the lack of higher education training facilities and programs. For example, one state reported that many staff hired as Early Interventionists have a degree that is general in nature such as a Bachelor of Science in psychology. Another coordinator reported that his/her state only had two colleges that had ECSE programs. Others described programs in their state as small, limited and lacking resources. Many of the respondents expressed concern that the programs in their state rarely addressed the needs of infants and toddlers, or taught about family-centered ways to deliver services in natural environments.

Over one-third (35.7%) of the respondents identified issues concerning salary and benefits as a considerable barrier to recruiting and retaining qualified personnel. Geographic issues functioned as a barrier for 31.0% of the respondents. Many of the respondents viewed the rural nature of their state as contributing to the difficulty of recruiting and retaining qualified EI personnel. Some states have very remote areas requiring professionals to travel several hours to serve one child. According to the respondents, geographic issues further deter prospective personnel simply because they are not interested in re-locating to less desirable areas.

Discussion

There has been a longstanding national concern on how best to meet the needs of young children with disabilities and their families. Personnel shortages have posed one of the greatest challenges to meeting this need. Part C systems across the country face the dual challenge of increasing the number of EI personnel while simultaneously maintaining high standards. The driving questions become how to meet personnel demands while promoting quality of EI personnel and what steps can we take to address the current situation. This Center was created to examine EI personnel issues and make recommendations to improve personnel preparation policy and practice. The overall goal

of the Center is to increase the number and improve the quality of personnel practicing in EI and ECSE.

This study identified characteristics of the Part C system that impact personnel. Examination of the Part C system in each state revealed factors that unify the field and others that lead to differences. With respect to unifying elements, federal legislation and monitoring processes provide an infrastructure on which to develop practices. States all demonstrate commitment to the Part C system, with varying methods of legislation and financial support. Each state has developed policy relating to EI personnel with nearly half of the states creating credentialing specific to EI over the past decade. The family-centered philosophy also serves as an underlying framework that adds unity to the Part C system and attracts personnel to the field. Policy and the fundamental philosophy promote cohesion and provide common frameworks.

Differences in state systems are highlighted when examining factors such as: organizational structure, employment sources, and personnel preparation programming. These variations create challenges in effectively evaluating EI programs, monitoring and implementing change initiatives to promote personnel development. Data collection within and across states is not firmly developed, with only 35.6% of states having any type of statewide personnel database. A substantial number of state coordinators report being unsure about the adequacy of personnel supply (up to 31.1%) or adequacy of training (up to 35.6%). Given this lack of systematic data collection, evaluation of personnel developmental initiatives will be seriously compromised.

Despite federal and state support, Part C systems experience challenges with the implementation of personnel development programs to meet the needs of young children with disabilities and their families. Competition of resources will always be present. Geographical factors play a role in obtaining personnel and in delivering training opportunities with 31.0% of states reporting issues relating to location. State Part C systems vary in their history and their place on the continuum of program development. The Part C system in each state has responded in its own way to meet the unique demands of its state, resulting in quite a variety of scenarios relating to personnel.

Conclusion

As a way to improve service delivery for children and their families, it was essential that we examined the personnel preparation systems for EI and Early Childhood Special Education across the country. Results from this study will contribute to a better understanding of Part C system organizations, personnel preparation opportunities, and effective ways to obtain qualified personnel that will lead to improved policies and practices.

Appendix A
The Center for Personnel Preparation in Early Intervention/ Early Childhood Special Education

Part C Coordinator Web Survey

GREETING

Thank you for agreeing to complete a survey for the Center for Personnel Preparation in Early Intervention/ Early Childhood Special Education. This center is a federally funded OSEP project under the direction of 3 co-directors, Mary Beth Bruder at the University of CT, Laurie Dinnebeil at the University of Toledo, and Vicki Stayton at Western KY University.

This is a 5-year program that will study Early Intervention personnel preparation. We will be doing a series of studies that look at states' personnel standards and credentialing along with higher education personnel preparation opportunities.

We appreciate you taking the time to complete this survey. Please complete as much of the survey as possible. If you feel that any of the questions should be answered by one on your colleagues, please indicate that person's name and contact information in the response space.

We have gone through our Institutional Review Board (IRB) for approval of this survey. The information that we are gathering will be available for public information. You may omit any answers that you do not feel comfortable responding to.

Please feel free to call us at anytime if you have any questions while completing this survey. We will also be following up with you by phone to briefly review your responses

Contact Information:

Deb Bubela bubela@uchc.edu (860) 679-1562

Amy Novotny anovotny@uchc.edu (860) 679-1585

Survey Outline:

- Introductory Questions
  - CSPD Coordinator
  - Web Site Reliability
- Background on Part C Program
  - Part C Structure
  - Funding
  - Employment
  - State Requirements
- Personnel Requirements
  - Personnel Standards
  - Changes in Personnel Requirements
  - Credential
  - Training Requirements
- Training Information
  - Inservice Training
  - Preservice Training
- Sharing your Knowledge & Experience
  - Barriers & facilitators in obtaining appropriately qualified personnel
  - How our center can assist you

Documents needed for completing survey:

- ❑ Dec. 1 OSEP Counts
- ❑ Interagency Agreement
- ❑ State Improvement Plan
- ❑ Personnel Standards
- ❑ CSPD Document Describing Inservice and Preservice Training
- ❑ Training Directory
- ❑ Directory or List of Higher Ed. Programs

We will also be requesting hard copies of these documents or website URL's where information can be downloaded.

Part C Survey

INTRODUCTORY QUESTIONS

COMPREHENSIVE SYSTEM OF PERSONNEL DEVELOPMENT (CSPD) COORDINATOR INFORMATION

1. Who is your Part C CSPD coordinator?

2. In case we have any questions that come up in the course of our project, how could we contact him/her?

Web Site Reliability

3. Because we are using your web site as a resource, we'd like to know if that information is current and accurate.

   ☐ Yes

   ☐ No

   ☐ Unsure

   Additional Comments:

4. How often is your Part C web site updated?

5. What agency or department is responsible for updating your web site?

☼If there are any unanswered Introductory Questions who can we contact for that information?
Name:
Contact Information:

BACKGROUND ON PART C PROGRAM

PART C STRUCTURE

6. What is the lead agency for your Part C system?

7. Have Part C services always been provided through the lead agency identified above?

   ☐ Yes

   ☐ No How long has that been the lead agency?

   ☐ Unsure

   Additional Comments:

8. How is Part C mandated in your state?

   ☐ Legislated

   ☐ Executive order from governor

   ☐ Other Please explain:

   Additional Comments:

9. a. How stable is the organizational structure within the Part C program?

b. Are there any threats to the Part C system in your state?

10. As you know, Part C is structured so differently in every state. How is the Part C system organized in your state? How are services provided?

- ☐ On a county basis
- ☐ Through local ICC's
- ☐ Regional offices
- ☐ A central office
- ☐ Other *Please provide brief description*:

Additional Comments:

11. How many children does your state's Part C program serve?

FUNDING

12. What is your total Part C budget?

13. a. What are your funding sources for Part C?

b. What are the specific percentages?

Source	☐ Federal	☐ State	☐ Local	☐ Medicaid	☐ Private Insurance	☐ Other
Percent	_ _%	__ _%	_ _%	_ _%	_ _%	_ _%

14. Do you think that the funding is stable?

PERSONNEL

15. Who employs Part C personnel? (check all that apply)

- ☐ State Department (which one?)
- ☐ Local Education Agency
- ☐ Regional Collaborative Units (ex. Regional Education Service Centers, BOCES)
- ☐ Private For Profit Agency
- ☐ Private Not For Profit Agency
- ☐ Private Individual Therapist
- ☐ Other *Please provide brief description:*

16. Are any of these employees unionized?

☐ Yes Which ones?

How does unionization affect EI services?

☐ No

☐ Unsure

Additional Comments:

17. a. We're trying to get a sense of how many Part C employees are in each state. How many FTE's (Full Time Equivalents) did you report in your December 1 count to OSEP?

b. How many Part C providers is that?

c. Can you send us your December 1 count information?

18. Do you have a statewide personnel database that you update more regularly than the annual report to OSEP?

☐ Yes

☐ No

☐ Unsure

Additional Comments:

19. a. Are there adequate numbers of personnel across the various disciplines in Early Intervention? *(Record responses in Personnel Chart.)*

Additional Comments:

b. Do you feel that Early Intervention are appropriately trained? *(Record responses in Personnel Chart.)*

Additional Comments:

Personnel Chart						
Discipline	**Numbers**			**Appropriately Trained**		
	Adequate	Shortage	Unsure	Yes	No	Unsure
Special educators	☐	☐	☐	☐	☐	☐
Audiologists	☐	☐	☐	☐	☐	☐
Speech/language pathologists	☐	☐	☐	☐	☐	☐
Occupational therapists	☐	☐	☐	☐	☐	☐
Physical therapists	☐	☐	☐	☐	☐	☐
Orientation/mobility specialists	☐	☐	☐	☐	☐	☐
Nutritionists	☐	☐	☐	☐	☐	☐
Pediatricians and other physicians	☐	☐	☐	☐	☐	☐
Nurses	☐	☐	☐	☐	☐	☐
Family therapists	☐	☐	☐	☐	☐	☐
Psychologists	☐	☐	☐	☐	☐	☐
Social workers	☐	☐	☐	☐	☐	☐
Service coordinators	☐	☐	☐	☐	☐	☐
Other *Explain:*	☐	☐	☐	☐	☐	☐
Other *Explain:*	☐	☐	☐	☐	☐	☐
Other *Explain:*	☐	☐	☐	☐	☐	☐
Other *Explain:*	☐	☐	☐	☐	☐	☐
Other *Explain:*	☐	☐	☐	☐	☐	☐

PART C & B INTERAGENCY AGREEMENT

(Answer question 20 only if Part C has a non-educational lead agency).

20. Does your interagency agreement with education address personnel preparation at all?

☐ Yes Can you tell us about that?

Can we get a copy?

☐ No

☐ Unsure

Additional Comments:

OSEP (OFFICE OF SPECIAL EDUCATION PROGRAMS) STATE IMPROVEMENT PLAN

21. Is EI personnel preparation addressed in your state improvement plan?

☐ Yes Can you tell us about that?

Can we get a copy?

☐ No

☐ Unsure

Additional Comments:

COMPREHENSIVE SYSTEM OF PERSONNEL DEVELOPMENT (CSPD)

22. How is your CSPD addressing personnel preparation in EI?

23. a. Does your state's CSPD have a written document that describes inservice training opportunities for EI professionals?

☐ Yes How can we get a copy of that document?

☐ No

☐ Unsure

Additional Comments:

b. How about for preservice?

☐ Yes How can we get a copy?

☐ No

☐ Unsure

Additional Comments:

INTERAGENCY COORDINATING COUNCIL (ICC)

24. a. Does your ICC have a Personnel Preparation committee?

- ☐ Yes
- ☐ No
- ☐ Unsure

Additional Comments:

b. Who is the personnel preparation representative on the ICC?

c. How can we contact that person?

25. What EI personnel preparation initiatives is the ICC currently working on?

☼ If there are any unanswered Background Questions who can we contact for that information?
Name:
Contact Information:

STANDARDS, CERTIFICATION, LICENSING AND CREDENTIAL

STANDARDS

26. a. What is the best way for us to obtain a copy of the your state's personnel standards?

b. Please review the Personnel Requirement Chart that we have provided for accuracy. Please add any information that we were unable to find about your state's personnel requirements.

Part C Personnel Requirement Chart

Service Providers/ Disciplines	Meets Highest Minimum	**Initial License/Certification**				**Renewal**		Reciprocity	**What related tasks are they permitted to do & who can they work with**	**What related tasks are they not permitted to do & who can they not work with**
	X	Degree	Exam	Practicum	Other	CEU's (Discipline/ EI Specific)	Other	X	(e.g. service coordination, evaluations, supervision restrictions, IFSP/IEP development, children in certain age groups, children with certain special needs.)	
Related Service Providers										
Audiologist	☐							☐		
Speech/language pathologist	☐							☐		
Occupational therapist	☐							☐		
Physical therapist	☐							☐		
Orientation/mobility specialist	☐							☐		
Pediatricians & other physicians	☐							☐		
Nurse	☐							☐		
Nutritionist/Dietician	☐							☐		
Family therapist	☐							☐		
Psychologist	☐							☐		
Social Worker	☐							☐		

Part C Personnel Requirement Chart

Service Providers/ Disciplines	Meets Highest Minimum	Initial License/Certification				Renewal		Reciprocity	What related tasks are they permitted to do & who can they work with	What related tasks are they not permitted to do & who can they not work with
	X	Degree	Exam	Practicum	Other	CEU's (Discipline/ EI Specific)	Other	X	(e.g. service coordination, evaluations, supervision restrictions, IFSP/IEP development, children in certain age groups, children with certain special needs.)	
Child Service Coordinator	☐							☐		
Special Educator: (Title used in state)	☐							☐		
Other:	☐							☐		
Other:	☐							☐		
Prompt: Has your state created any other professional categories or roles that are not part of the federal requirements that you have created standards for?										
Other:	☐							☐		
Other:	☐							☐		
Other:	☐							☐		
Other:	☐							☐		

CHANGES IN PERSONNEL REQUIREMENTS

27. In regards to your personnel standards, have there been modifications to existing requirements for any of the specific disciplines? (See Personnel Chart for list of disciplines.)

☐ Yes
☐ In process

If 'Yes' answer questions A. – H.
If 'In process' use modified questions A. – H.
Enter responses in 'Changes In Personnel Requirements Table.'

☐ No

☐ Unsure

Additional Comments:

28. Have you added or created any professional categories that are not part of the federal requirements? (For example, CT has added the EI Assistant and EI Associate professional categories.)

☐ Yes
☐ In process

If 'Yes' answer questions A. – H.
If 'In process' use modified questions A. – H.
Enter responses in 'Changes In Personnel Requirements Table.'

☐ No

If 'No' skip to question 29.

☐ Unsure

Additional Comments:

(Questions A. - H. should be answered for each change, addition or creation of a professional role.)

A. How long has this change been in effect?

(In process: How long have you been working on this change?*)*

B. What was the motivation for this change?

(In process: What is the motivation for this change?)

C. What was the length of time it took to implement this change?

(*In process: Skip.)*

D. Can you tell me about the process your state went through to implement this change?

(In process: Can you tell me about the process you are going through to make this change?*)*

E. Were there barriers to the process? What were they?

(In process: Are there any barriers to the change you're making? What are they?)

F. What helped move the process along?)

(In process: What is helping to move this process along?)

G. What impact has this change had on the quality of EI personnel?

(In process: Do you think this change will have any impact on the quality of EI personnel?)

H. How has this change affected the numbers of EI personnel?

(In process: Do you think this change will affect the numbers of EI personnel?)

CREDENTIAL

29. Does your state have or are you in the process of developing a certification or credential specific to early intervention?

☐ Yes — *If 'Yes' answer questions A. – K.*

☐ In process of developing credential — *If 'In process'* use modified questions A. – K.

☐ No — *If 'No' skip to question 30.*

Additional Comments:

A. Can you tell us about the credential?

(In process: Can you tell us about the credential that you're developing?)

B. How does one qualify for the credential?

(In process: How will one qualify for the credential?)

☐ Competencies

☐ Exam

☐ Preservice preparation

☐ Coursework

☐ Other: Explain:

C. Who is required to obtain this credential?

(In process: Who will be required to obtain this credential?)

D. Who oversees the credentialing process?

(In process: Who will oversee the credentialing process?)

E. How long has the credential been in effect?

(In process: Skip.)

F. What was the motivation for this credential?

(In process: What is the motivation for this credential?*)*

G. How long did it take your state to implement the credential?

(In process: How long have you been working on developing this credential?)

H. Were there barriers to the process? What are they?

(In process: Have there been any barriers to the process? What are they?)

I. What helped move the process along?

(In process: What is helping to move the process along?)

J. What impact has this change had on the quality of EI personnel?

(In process: Do you think this change will have any impact on the quality of EI personnel?)

K. How has this credential affected the number of EI personnel?

(In process: Do you think this credential will affect the numbers of EI personnel?)

30. Does your state have any other requirements that are special or different? Are there any additional requirements or specific qualifications beyond the licensure/certification of each EI professional discipline?

TRAINING AS PART OF PERSONNEL REQUIREMENTS

31. a. Does your state require any specific training for EI professionals before they begin employment? For example, an orientation to early intervention or child service coordination training.

☐ Yes What type of training?

☐ No

☐ Unsure

Additional Comments:

b. Is any specific training required during employment? For example, yearly refresher inservices.

☐ Yes What type of training?

☐ No

☐ Unsure

Additional Comments:

32. Do you require personnel to get continuing education units (C.E.U's) specific to EI?

☐ Yes Explain:

☐ No

☐ Unsure

Additional Comments:

33. Is there a career ladder for early intervention providers in your state?

For example, is there a way for early intervention providers to advance based on training and performance within the EI system?

☐ Yes Explain:

What supports does Part C provide to advance through the system?

☐ No

☐ Unsure

Additional Comments:

34. Are there any alternative methods to obtain certification, licensure or credential?

☼ If there are any unanswered Standards, Certification, Licensing and Credential Questions who can we contact for that information?
Name:
Contact Information:

Training Information

35. Do you have a training directory for inservice training opportunities?

☐ Yes Can we get a copy of this?

☐ No

☐ Unsure

Additional Comments:

36. Do you have a directory or list of higher education programs that prepare EI providers in your state?

☐ Yes How can we obtain this list?

☐ No

☐ Unsure

Additional Comments:

37. a. Are there any programs that specifically prepare professionals to work in the field of EI?

b. What disciplines do the programs prepare?

38. Does your state have a higher education consortium?

☐ Yes Are they addressing EI issues?

Who should we contact about the higher ed. consortium?

☐ No

☐ Unsure

39. Are there any other agencies in your state that provide training that we haven't talked about yet?

☼ If there are any unanswered Training Information Questions who can we contact for that information?
Name:
Contact Information:

PART C COORDINATOR INFORMATION

40. How long have you been a Part C coordinator?

41. Can you tell us about your background?

ENDING QUESTIONS

42. What have you found to be the biggest barriers in obtaining personnel who are appropriately qualified to deliver Part C services?

43. What have you found most helpful in obtaining qualified personnel?

44. How could our center best assist you and your state in addressing personnel challenges?

45. Is there any other information about your state or Part C program that you think would contribute to our knowledge of personnel requirements and personnel preparation?

CLOSING

Thank you for your time and your contribution to our study. The information that you'll share will be very helpful in understanding Part C personnel issues so that we can better prepare personnel and ultimately assist families and children. We will take your input into consideration when we develop future plans for our study.

If you have any questions please contact us:

Contact information:	Deb Bubela	bubela@uchc.edu	(860) 679-1562
	Amy Novotny	anovotny@uchc.edu	(860) 679-1585

If you have copies of the following documents, we would like to have a copy for our research data.

- ☐ Dec. 1 Counts
- ☐ Interagency Agreement
- ☐ State Improvement Plan
- ☐ Personnel Standards
- ☐ CSPD Document Describing Inservice and Preservice Training
- ☐ Training Directory
- ☐ Directory or List of Higher Ed. Programs

Thanks again.

Appendix B. *Site Assignments by State*.

Western KY University	**University of Toledo**	**University of CT**
Alabama	Alaska	Arizona
Arkansas	California	Colorado
Florida	Delaware	Connecticut
Idaho	Georgia	District of Columbia
Iowa	Illinois	Hawaii
Kentucky	Maine	Indiana
Louisiana	Michigan	Kansas
Mississippi	Missouri	Maryland
Nebraska	Nevada	Massachusetts
New Jersey	New Mexico	Minnesota
North Carolina	North Dakota	Montana
Oklahoma	Ohio	New Hampshire
South Carolina	Oregon	New York
Tennessee	South Dakota	Pennsylvania
Virgin Islands	Utah	Puerto Rico
Wisconsin	Virginia	Rhode Island
	Washington	Texas
	Wyoming	Vermont
		West Virginia

Appendix C. *States Represented in Data Analysis.*

State Represented	Part C Coordinator	State Represented	Part C Coordinator
Alabama	X	New York	
Alaska	X	North Carolina	X
Arizona	X	North Dakota	X
Arkansas	X	Ohio	X
California	X	Oklahoma	X
Colorado	X	Oregon	X
Connecticut	X	Pennsylvania	X
Delaware	X	Puerto Rico	
District of Columbia	X	Rhode Island	X
Florida	X	South Carolina	
Georgia	X	South Dakota	X
Hawaii	X	Tennessee	
Idaho	X	Texas	X
Illinois	X	Utah	X
Indiana	X	Vermont	X
Iowa	X	Virginia	X
Kansas	X	Virgin Islands	
Kentucky	X	Washington	
Louisiana	X	West Virginia	X
Maine	X	Wisconsin	X
Maryland	X	Wyoming	X
Massachusetts	X	**TOTAL**	45
Michigan			
Minnesota	X		
Mississippi	X		
Missouri	X		
Montana	X		
Nebraska			
Nevada	X		
New Hampshire	X		
New Jersey	X		
New Mexico	X		

Appendix B

THE CENTER TO INFORM PERSONNEL PREPARATION POLICY AND PRACTICE IN EARLY INTERVENTION AND EARLY CHILDHOOD SPECIAL EDUCATION

STUDY I DATA REPORT:
THE NATIONAL LANDSCAPE OF EARLY CHILDHOOD SPECIAL EDUCATION IN PERSONNEL PREPARATION STANDARDS UNDER 619 OF THE INDIVIDUALS WITH DISABILITIES EDUCATION ACT (IDEA)

CDFA # 84.325J

Primary Site:

University of Connecticut
A.J. Pappanikou Center
for Excellence in Developmental Disabilities Education, Research, and Service
UConn Health Center – MC 6222
263 Farmington Ave.
Farmington, CT 06030

THE CENTER TO INFORM PERSONNEL PREPARATION POLICY AND PRACTICE IN EARLY INTERVENTION AND EARLY CHILDHOOD SPECIAL EDUCATION

STUDY I DATA REPORT: THE NATIONAL LANDSCAPE OF EARLY CHILDHOOD SPECIAL EDUCATION IN PERSONNEL PREPARATION STANDARDS UNDER 619 OF THE INDIVIDUALS WITH DISABILITIES EDUCATION ACT (IDEA)

Introduction

The Center to Inform Personnel Preparation Policy and Practice in Early Intervention and Early Childhood Special Education (referred to hereafter as the Center) was established in January, 2003 as a five-year project funded by the Office of Special Education Programs. The Center represents the collaborative efforts of the University of Connecticut, Western Kentucky University and the University of Toledo. The purpose of the Center is to collect, synthesize and analyze data on: 1) the certification and licensure requirements for personnel working with infants, toddlers, and preschoolers who have special needs and their families; 2) the quality of training programs that prepare these professionals; and 3) the supply and demand of professionals representing all disciplines who provide both Early Intervention (EI) and Early Childhood Special Education (ECSE) services. This data will be utilized to identify critical gaps in current knowledge of personnel preparation programs. The center will disseminate recommendations for policy and practice related to personnel preparation at regional and national forums.

Purpose of the Report

This report focuses on data collected from the 619 Coordinator Survey during Study I: *The National Landscape of Early Intervention and Early Childhood Special Education*. The study was designed to obtain comprehensive information relating to:

4) The 619 system structure, service delivery and staffing in each state and territory.
5) Personnel preparation opportunities for ECSE professionals and para-professionals.
6) Standards and requirements for all service providers in ECSE systems.

Methodology

Survey

The 619 Coordinator Survey consisted of 42 close-ended and open response questions grouped into five sections: 1) introductory questions about the CSPD coordinator and the 619 website; 2) background information about the state's 619 program (i.e. structure, funding, employment, and state requirements); 3) personnel requirements; 4) training information; and 5) the barriers and facilitators in obtaining appropriately qualified personnel (see Appendix A for a copy of the survey). Some of the multiple-choice questions required respondents to select only one response, while others allowed respondents to select all relevant answers. Respondents were offered an opportunity to provide additional comments to elaborate on the multiple-choice questions. The survey also asked open-ended questions which allowed respondents to give detailed responses on a specific topic in a less structured format.

Respondents

The 619 coordinators (n = 53) from each state, District of Columbia, and the territories of Puerto Rico and the Virgin Islands comprised the targeted population for this study and were randomly assigned to one of the three collaborating research sites (i.e. University of Connecticut, Western Kentucky University and the University of Toledo) (see Appendix B for site assignment by state). The 619 coordinators or representatives (e.g. consultants, Comprehensive System of Personnel Development members) from 48 states completed the survey for a response rate of 90.6% (see Table 1). The amount of experience the respondents had in their current position ranged from 2 months to 24 years with a mean of 7 years.

Table 1. *Number of Surveys Completed by Site (n = 48)*

	CT	KY	OH	Total
No. of States in Sample	19	16	18	53
No. of States Completing Survey	18	14	16	48
Response Rate	94.7%	87.5%	88.9%	90.6%

When a 619 coordinator was not able to provide any information needed, he/she was asked to obtain the necessary information from his/her colleague(s) or to make a referral to the person(s) who could best answer the question. Therefore, survey responses often represent collaborative efforts among 619 coordinators, Comprehensive System of Personnel Development (CSPD) coordinators and other system personnel.

Data Collection

The study used three methods of data collection:

1) Web-Based Searches: Project staff conducted electronic searches of the 619 program in each of their assigned states to serve as preparation for data collection and as supporting documents for future analysis.
2) Telephone Surveys: Slightly under one-half (41.7%) of the respondents opted to complete the survey via the telephone (see Table 2). The length of time to complete a telephone survey ranged from 60 to 120 minutes. Research staff made audio tapes and written records of all telephone survey responses. To ensure accuracy and reliability of the data collection, responses were verified by respondents before being entered into SPSS data files.
3) Electronic Surveys: Slightly over half (58.3%) of the respondents opted to participate in the study by completing the electronic version of the survey. Research staff e-mailed an electronic version of the survey directly to the respondent along with instructions for completing the survey. Follow-up telephone conversation occurred when clarification of responses was necessary.

Table 2. *Method of Survey Completion (n = 48)*

Method	Frequency	Percent
Electronic Survey	28	58.3
Telephone Survey	20	41.7
TOTAL	48	100.0

Fidelity Procedures

Several fidelity procedures were developed to ensure the consistency and accuracy of research implementation across sites and project staff. Prior to any data collection, the project coordinator developed written guidelines and organizational materials (i.e. protocols for conducting telephone surveys, recording data, and compiling information) which were distributed and explained to all research assistants.

All staff were instructed on the proper interview protocol. Five interview training sessions were conducted via conference call with available staff. Following each training interview, project staff were given opportunities to clarify the protocol as it related to various scenarios. The training interviews and subsequent discussions were tape recorded to allow any staff member not in attendance the opportunity to benefit from the training.

As part of ongoing reliability procedures project co-directors and coordinators at each site reviewed interview tapes and provided feedback to interviewers. In addition, one-hour weekly conference calls were conducted during the five month data collection process to clarify questions that emerged during interviews. The data collection forms for telephone surveys were returned to respondents allowing them to verify the accuracy of the recorded responses. Staff at each of the three research sites reviewed 20% of all telephone survey tape recordings for accuracy of data interpretation and data entry. An inter-rater reliability of 90.9% was obtained.

All data (i.e. responses from telephone surveys, electronic surveys, tape-recordings of telephone surveys and data collection sheets) were sent to the University of Connecticut. Project staff at the University of Connecticut reviewed each survey to ensure accuracy and thoroughness of responses as well as inter-site reliability. All data were entered into an Access data file and quantitative responses then were entered into SPSS. Data entry monitoring was conducted on 100% of the data.

Data of Analysis

Both formats (electronic and telephone) of the survey contained the same questions and the results from the two data collection methods were analyzed in aggregate (see Appendix C for a list of states represented in data analysis). Descriptive statistics (means, frequencies, and percentages) were calculated for the quantitative variables. Research staff analyzed the qualitative responses to identify salient themes. Each response then was coded to consensus based on the themes.

Results

The findings were grouped into the following topics: 1) introductory questions; 2) organizational structure of states' 619 program; 3) personnel issues; and 4) factors that influence obtaining appropriately qualified personnel.

Introductory Questions

Because the study used the states' 619 websites as a resource, the researchers asked respondents if the information on their website was current and accurate. Almost two-thirds (62.5%) of the respondents reported that their state's website was current and accurate while 10.4% of the respondents reported that their website might not be current nor accurate. Three of the responding states do not have a 619 web site. The respondents reported that their websites were updated on a frequent (18.8%) or an as needed basis (27.1%). The vast majority (89.6%) of the respondents stated that their state's Department of Education was the entity responsible for implementing the updates.

Organizational Structure of States' 619 Programs

Respondents were asked to describe how stable their organizational structure was within the 619 program. Over three-quarters (81.3%) of the respondents perceived the 619 organizational structure as being stable, or very stable. An additional 6.3% of respondents stated that their organizational structure was fairly stable. Only two respondents (4.2%) perceived their state's 619 organizational structures as being unstable. However, four (8.4%) respondents mentioned that the stability of their organization was either threatened or uncertain.

When asked if there were any threats to the organization of the 619 program within their state, over half (60.4%) of the respondents reported that there were no threats. However, 27.1% of the respondents identified funding issues and another 4.2% described reorganization within the existing agency as threats.

The 619 respondents in this study reported receiving funding from multiple sources. All (100%) of the responding respondents reported receiving federal funds and the vast majority (80.4%) reported receiving state funds (see Table 3). Almost two-thirds (63.0%) of those responding reported receiving local funds. The 619 programs also received funds from Medicaid (47.8%), private insurance (8.7%), grants (2.2%), and national organizations or associations (2.2%).

Over two-fifths (43.5%) of the respondents reported that their funding was stable. Additional respondents tempered their view of having a stable funding source with caveats such as having insufficient funds (15.2%), having stability only in some areas (15.2%), and anticipating issues (4.3%). A relatively small percent (15.2%) of the respondents stated that their funding was not stable.

Table 3. *Funding Sources for 619 Programs (n = 46)*

	Frequency	Percent
Federal	46	100.0
State	37	80.4
Local	29	63.0
Medicaid	22	47.8
Private Insurance	4	8.7
Grants	1	2.2
National Organizations/Associations	1	2.2
Other	1	2.2

Findings from the study indicate that 619 programs are primarily organized through local education agencies (85.4%). Other organizational structures include regional (12.5%), or county (8.3%) based service provision. Nine (18.8%) of the states reported other organizational affiliations including the Department of Human Services or collaborations among school districts referred to as "special education cooperatives," "interlocals," or "Special Education Local Plan Areas" (see Table 4).

Table 4. *Organizational Structure of 619 Programs (n = 48)*

Organization	Frequency	Percent
Local Education Agencies	41	85.4
Regional Office	6	12.5
County	4	8.3
Other	9	18.8

Personnel Issues

The survey sought to illuminate the current status of 619 systems' personnel supply, training, and standards. The survey asked a series of questions to address these issues. Below is a description of the findings.

Types of Service Provider Employers

The respondents stated that the ECSE personnel in their state are most frequently employed by local education agencies (89.6%) followed by a State Department (70.8%) (see Table 5). Other employers included regional collaborative units (31.3%), private not for profit agencies (31.3%), private individual therapists (22.9%), private for profit agencies (20.8%), private preschools (14.6%), and private not for profit preschools (14.6%). Some 619 personnel are unionized in about one-half (56.3%) of the responding states and in one-third (33.3%) of the states they are not.

Table 5. *Types of 619 Personnel Employers (n = 48)*

	Frequency	Percent
Local Education Agency	43	89.6
State Department	34	70.8
Regional Collaborative Units	15	31.3
Private Not For Profit Agency	15	31.3
Private Individual Therapist	11	22.9
Private For Profit Agency	10	20.8
Private Preschools	7	14.6
Private Not For Profit Preschools	7	14.6
Other Agencies	4	8.3

Personnel Supply

Respondents were asked to indicate whether their state had adequate numbers of personnel across the various disciplines in ECSE. Over one-third of the states reported having an adequate supply of audiologists (37.5%) and paraprofessionals (36.2%) (see Table 6). Respondents also identified disciplines with statewide or localized personnel shortages. Speech/language pathologists were the most frequently reported shortage with 85.1% of the states reporting this finding. Other disciplines with considerable percentages of respondents reporting shortages included special educators (59.6%), occupational therapists (55.4%), and physical therapists (49.0%). A substantial number of respondents were unsure about the adequacy of the personnel supply in their respective states particularly for rehabilitation counselors (63.8%), recreation therapists (63.8%), family therapists (59.6%), and pediatricians and other physicians (52.1%). Reporting on specific personnel supply numbers is complicated for many 619 coordinators especially when over one-half (56.3%) of the participating states do not have an updated 619 personnel database and an additional 18.8% of the respondents are not sure if their state has such a database.

Table 6. *Percent of States Reporting Adequacy of 619 Personnel Supply (n = 47)*

Discipline	*Adequate of Personnel Supply*	*Shortage of Personnel Supply*	*Unsure of Personnel Supply*
Audiologists	*37.5*	*20.9*	*39.6*
Paraprofessionals	*36.2*	*38.3*	*25.5*
Psychologists	*31.9*	*38.3*	*29.8*
Social Workers	*31.9*	*27.6*	*40.4*
Special Educators	*29.8*	*59.6*	*10.6*
Physical Therapists	*29.8*	*49.0*	*21.3*
Occupational Therapists	*27.7*	*55.4*	*17.0*
Pediatricians and other Physicians	*27.1*	*16.7*	*52.1*
Nurses	*27.1*	*29.2*	*41.7*
Guidance Counselors	*25.0*	*22.9*	*43.8*
Orientation/Mobility Specialists	*17.0*	*38.3*	*44.7*
Family Therapists	*17.0*	*17.0*	*59.6*
Recreation Therapists	*17.0*	*17.0*	*63.8*
Rehabilitation Counselors	*12.8*	*10.6*	*63.8*
Speech/Language Pathologists	*6.4*	*85.1*	*8.5*

Personnel Training

Respondents were asked if ECSE personnel in their state were appropriately trained to work with young children and their families. The percent of respondents indicating that ECSE professionals in their state were adequately trained varied by discipline (see Table 7). About half of the respondents felt their state had appropriately trained speech/language pathologists (51.1%), occupational therapists (46.8%), audiologists (43.8%), and physical therapists (44.7%). However, the respondents expressed concern about personnel in each professional discipline being appropriately trained particularly paraprofessionals (41.7%), special educators (25.5%), and psychologists (23.4%). In the section of the question that allowed for additional comments, respondents noted that 619 personnel in their state needed further training to work specifically with young children and their families. The need for additional training in ECSE was mentioned in 10.6% of the states for speech/language pathologists, occupational therapists, physical therapists, and special educators. A considerable percent of respondents were unsure whether the ECSE personnel in their state were appropriately trained including rehabilitation counselors (56.5%), recreational therapists (56.5%), and family therapists (51.1%). In addition to the categories listed in the survey, respondents also gave information about shortages of other professionals such as interpreters and bilingual special educators.

Table 7. *Percent of States Reporting Adequacy of Training of 619 Personnel (n = 47)*

Discipline	*Percent of Responses for Number of Providers*			
	Adequately Trained	*Not Adequately Trained*	*Need Additional Training in ECSE*	*Unsure*
Speech/Language Pathologists	*51.1*	*17.0*	*10.6*	*17.0*
Occupational Therapists	*46.8*	*14.9*	*10.6*	*23.4*
Audiologists	*43.8*	*4.2*	*8.3*	*37.5*
Physical Therapists	*44.7*	*14.9*	*10.6*	*25.5*
Special Educators	*40.4*	*25.5*	*10.6*	*19.1*
Social Workers	*40.4*	*12.8*	*6.4*	*36.2*
Orientation/Mobility Specialists	*36.2*	*8.5*	*8.5*	*42.6*
Psychologists	*34.0*	*23.4*	*8.5*	*29.8*
Guidance Counselors	*32.6*	*6.5*	*6.5*	*41.3*
Nurses	*31.9*	*14.9*	*6.4*	*40.4*
Pediatricians and Other Physicians	*27.1*	*18.8*	*6.3*	*39.6*
Paraprofessionals	*27.1*	*41.7*	*2.1*	*25.0*
Family Therapists	*21.3*	*10.6*	*6.4*	*51.1*
Recreation Therapists	*19.6*	*4.3*	*6.5*	*56.5*
Rehabilitation Counselors	*17.4*	*2.2*	*6.5*	*56.5*

Interagency Collaboration

The 619 respondents reported that their state used several avenues to address personnel preparation. The most frequently cited method was through State Improvement Plans (SIPs) which was mentioned in 66.7% of the cases (see Table 8). In addition, 619 respondents in 43.8% of the states reported the presence of an interagency agreement that addressed personnel preparation. Over half (56.3%) of the 619 respondents reported that their state's Interagency Coordinating Council (ICC) had a personnel preparation committee. Based on qualitative responses, state's ICC's personnel preparation initiatives included topics such as staff development training, and the development and revisions of credentials and licenses.

Table 8. *Methods of Addressing ECSE in Personnel Preparation (n = 48)*

	Percent of States Responding			
Method	Yes	No	Unsure	Indirectly
State Improvement Plan	66.7	29.2	0.0	4.2
ICC Personnel Prep Committee	56.3	31.3	12.5	NA
Interagency Agreement	43.8	31.3	4.2	NA
CSPD Document for In-Service	29.2	62.5	8.3	NA
CSPD Document for Pre-Service	22.9	68.8	8.3	NA

The 619 respondents stated that their Comprehensive System of Personnel Development (CSPD) addressed ECSE personnel preparation through various activities including providing in-service training, linking with institutions of higher education, offering capacity building grants, and conducting needs assessments. Of the participating 619 representatives, 29.2% reported that their state's written CSPD document described in-service training opportunities, and 22.9% reported that their state's written CSPD document described pre-service training.

Changes in Personnel Requirements

The respondents were asked a series of questions to identify national trends focusing on changes to existing ECSE personnel requirements. The data indicate that over one-half (56.3 %) of the states have or are in the process of making modifications in their personnel requirements (see Table 9). For example, some states have responded to the No Child Left Behind Act by requiring teachers to obtain an additional six hours in reading instruction. Other states have addressed licensure examination with a trend toward competency based assessment and an increase in requirements. Eight (16.7 %) of the respondents reported that their state had added or created new ECSE professional categories with examples being sign language interpreter, and learning consultant.

Table 9. *Percent of States Reporting Changes in Personnel Requirements (n = 48)*

Changes	*Yes or In Process*	*No*	*Unsure*
Modifications to Existing Requirements	*56.3*	*33.3*	*10.4*
Additional Professional Categories	*16.7*	*75.0*	*8.3*

According to the respondents, some of the reasons states have made these changes is to prepare ECSE teachers to work in inclusive settings with children who have diverse abilities and needs, to broaden foundational education, and to bring national standards and early childhood standards into alignment. These modifications and categorical additions have been in effect between 6 months and 24 years, with the implementation process taking 6 months to 18 years.

The respondents identified several factors that influenced the implementation of the new personnel requirements and categories. The primary facilitator for these changes was strong support from all ECSE stakeholder groups. For example, modifications and additions were expedited when there was strong state level lead agency support,

collaborative higher education initiatives, and public awareness of needs. Other respondents identified the importance of persistent leadership and a shared common vision.

There were several barriers that the respondents reportedly faced while implementing the modifications and additions. Time seemed to be the primary obstacle both in terms of the length of time it took to implement the changes as well as the increased demand on staff hours. The intrinsic competition of priorities and funding were mentioned as barriers. Lack of collaboration among stakeholder groups and "territorial claims" impeded the modification process. Failure to reach consensus on strategies also led to delays. Other reported difficulties related to higher education issues such as the lack of programs, and the shortage of faculty with the necessary expertise. Nearly three-quarters (73.7%) of the participating respondents stated that the changes have improved or have the potential to improve the quality of ECSE personnel but only 11.8% felt it would increase the number of ECSE personnel available.

State Credential for ECSE Professionals

In reviewing responses from respondents and verifying the information with state boards, thirty (62.6%) states have or are in the process of developing a credential specifically for ECSE personnel with an emphasis on teacher certification. The credentialing process is primarily overseen by the state's Department of Education. Of those states reporting ECSE credentials, twenty-three states provided additional information regarding qualifying procedures. Over two-thirds reported that ECSE personnel may qualify for a state certificate with pre-service preparation (69.6%), or course work (65.2%) (see Table 10). In addition, almost half of the states responding award the credential based on competencies (43.5%), and exams (43.5%).

Table 10. *Procedures for Qualifying for a Credential (n = 23)*

Procedures	Frequency	Percent
Pre-service Preparation	16	69.6
Course Work	15	65.2
Competencies	10	43.5
Exams	10	43.5
Experience	1	4.3
Recommendations	1	4.3
Follow-up Mentoring	1	4.3

Over half (54.2%) of the respondents reported that their state also offers alternative methods to obtaining a certification, license, or credential (see Table 11). A small percent (12.5%) of the states have additional requirements or specific qualifications beyond the licensure/certification of ECSE personnel.

Table 11. *Percent of States Using Alternative Methods and Additional Requirements for ECSE Certification (n = 48)*

	Yes	No	In Process	Unsure
Alternative Methods to Certification, Licensure, and Credential	54.2	33.3	2.1	10.4
Additional Requirements or Specific Qualifications	12.5	75.0	4.2	8.3

The vast majority of the respondents stated that the motivation for implementing the ECSE state certification was to improve the training and skill level of current and potential teachers who work with young children with disabilities. State credentials were also implemented as a response to needs identified by the field, including the demand for educators who have a broad educational foundation and are prepared to teach children in inclusive environments. Another motivating factor was the need to align state standards with national standards.

The amount of time the states' ECSE credentials have been in effect ranges from being newly implemented to 25 years (mean = 12.6) with the development process taking 2 to 15 years (mean = 6.4). When asked what helped to facilitate the implementation of the new ECSE certification, the respondents offered several explanations. For example, several respondents reported that state board prioritization and support was extremely important in promoting the credentialing process. In addition, institutions of higher education played a critical role in moving the ECSE credential forward. Strong leadership and interagency collaboration also assisted the credentialing process.

Respondents identified factors that acted as barriers to developing and implementing the ECSE credential. When there was lack of collaborative efforts and consensus, the process was hindered. Many respondents identified the lengthy time line as having a negative effect. For example, one respondent noted that it takes several years to develop university programs, obtain approval, and graduate students through the revised programs.

Half (50.0%) of the respondents reported that the state certification has or will improve the quality of ECSE personnel. About one-third (30%), of the respondents reported that the state certification would not contribute to personnel quality, and the remaining 20% of respondents were unsure of the effect. One-third (33.3%) of the respondents felt the state certification has or will increase the number of qualified personnel. Another one-third (38.0%) of those responding were unsure of the effect of the state certification on ECSE personnel supply. Of the remaining respondents, equal numbers indicated that the certification would have no effect, or a detrimental effect.

State Training Requirements and Information for ECSE Professionals

According to the participating 619 representatives, some states have implemented training requirements to prepare professionals in ECSE as a condition of employment (see Table 12). Over one-half (56.3%) of the states require training for ECSE professionals during employment, and almost a quarter (22.9%) of the states require employees to obtain Continuing Educational Units (CEU's) related to the ECSE field. However, only one-tenth (10.4%) of the participating states require specific training for ECSE professionals before they begin employment.

These personnel requirements have contributed to the development of training opportunities. Almost all (97.9%) of the participating states report having higher education programs that are designed specifically to prepare educators and related service providers to work in the field of ECSE and almost two-thirds (65.1%) of the participating states have agencies other than higher education and lead agencies that provide ECSE training. Almost two-thirds (62.5%) of the participating states have a higher education consortium.

Table 12. *Percent of States Reporting Training and Career Requirements, Information, and Opportunities for ECSE Professionals (n = 48)*

Element of Training	Yes	No	Unsure
Training as Part of Personnel Requirements			
Training Required for ECSE Professionals Before Employment	10.4	77.1	12.5
Training Required for ECSE Professionals During Employment	56.3	31.3	12.5
Required CEU's Specific to ECSE	22.9	70.8	6.3
Training Information			
Directory of In-Service Training Opportunities	62.5	37.5	0.0
Directory of ECSE Higher Education Programs	56.3	35.4	8.3
Training Opportunities			
ECSE Higher Education Programs	97.9	2.1	0.0
Higher Education Consortium	62.8	10.4	27.1
Other Agencies that Provide ECSE Training	65.1	34.9	0.0
Career Ladder within ECSE Structure			
Career Ladder for ECSE Providers	33.3	60.4	6.3

Personnel interested in in-service training opportunities are able to refer to a directory in 62.5% of the states. However, accessing information on ECSE higher education programs appears to be difficult in many states since only about one-half (56.3%) have a directory on the topic even though almost all of the states report having such programs.

The data suggest that states have made progress in developing training requirements and opportunities. However, only one-third (33.3%) of the 619 respondents reported the existence of a career ladder within the ECSE system. Many respondents stated that their ECSE career ladder was unique to local school districts and typically based on teacher union contracts.

Obtaining Qualified Personnel in ECSE

At the close of the survey, respondents were given the opportunity to reflect on their experiences in the field and to describe aspects they believed facilitated and/or hindered obtaining personnel who are appropriately qualified to provide ECSE services. Their responses were coded into salient themes and are discussed below.

Facilitators

The researchers identified 13 themes based on the responses regarding facilitators in obtaining qualified personnel (see Table 13). The respondents most frequently cited training (20.9%) as a facilitator and described it as on-going professional development offered by local school systems, continuing education, internships, practicum experiences, and clinical fellowship year opportunities. In addition, respondents mentioned ways counties endorsed training with release time.

Similar to training, respondents stated that higher education programs (16.3%) were an effective way to obtain qualified personnel. For example, respondents advocated for community college articulation agreements, joint certification, and university degree programs.

In addition, a few respondents reported implementing certification, credentialing, and state standards (16.3%) as effective methods in obtaining qualified personnel. One respondent anticipated that more qualified teachers should be available with a new performance-based credentialing system that required content standards in mild disabilities and developmental standards in early childhood. Another respondent found his/her state's rural certification programs particularly effective for meeting local needs.

Respondents identified recruitment efforts (16.3%) as promoting the acquisition of adequate numbers of personnel, including "growing your own." They also acknowledged the importance of "word of mouth." In addition, some respondents endorsed actively recruiting from other states. One respondent reported that his/her state's website helped to recruit professionals on an international level.

Offering adequate salaries and benefits also appear to attract qualified personnel to the field according to 16.3% of the respondents.

Table 13. *Facilitators to Obtaining Qualified Personnel in ECSE (n = 43)*

Facilitators	Frequency	Percent
Training	9	20.9
Higher Education Programs	7	16.3
Certification/Credential/State Standards	7	16.3
Salary/Benefits	7	16.3
Recruitment	7	16.3
Interagency Initiatives	6	14.0
Geographic Issues	4	9.3
Characteristics of ECSE	4	9.3
Positive Perceptions of ECSE	3	7.0
Family-Oriented Philosophy	3	7.0
Grants/Funding Programs	2	4.7
Supervision/Mentorship	2	4.7
Other	2	4.7

Barriers

Respondents were asked to identify elements that acted as barriers to acquiring qualified ECSE personnel (see Table 14). Fifteen (32.6%) of the respondents identified issues concerning salary and benefits as a considerable barrier to recruiting and retaining qualified personnel. Several respondents stated that the recognized wage limitations of the field are exacerbated when prospective employers are "sandwiched" between districts or states that can offer more attractive salaries and benefits. Regardless of the relative pay structure of an area, many teachers appear to be motivated by better salaries that accompany promotions further draining the already limited personnel pool.

Table 14. *Barriers to Obtaining Qualified Personnel in ECSE (n = 46)*

Barriers	Frequency	Percent
Salary/Benefits	15	32.6
Higher Education Program Issues	14	30.4
Lack of Personnel Pool	12	26.1
Geographic Issues (Rural)	12	26.1
State Standards/Certification/Credential	8	17.4
Lack of Knowledge About ECSE	5	10.9
Negative Perceptions of ECSE	5	10.9
Characteristics of ECSE Tasks	5	10.9
Training Issues	4	8.7
Competition with Other States	4	8.7
State issues/Policies/Support	2	4.3
Lack of Interagency Collaboration	1	2.2

Another barrier, reported by 30.4% of the respondents, focused on higher education programs. Several respondents noted that there is an inadequate number of universities offering ECSE programs and the programs that do exist offer limited hands-on experience.

Geographic issues functioned as a barrier for 26.1% of the respondents. Many of the respondents viewed the rural nature of their states as contributing to the difficulty of recruiting and retaining qualified ECSE personnel. According to the respondents, geographic issues further deter prospective personnel simply because they are not interested in re-locating to less desirable areas. In addition to being less desirable, rural areas cannot compete with salaries, benefits, etc. like more populated areas. Accessing higher education ECSE programs is also difficult for prospective personnel who live in rural areas since they must travel long distances to get to campus.

One-quarter (26.1%) of the respondents stated that a primary barrier was simply the lack of a qualified pool of prospective personnel.

Discussion

There has been a longstanding national concern on how best to meet the educational needs of young children with disabilities. Personnel shortages have posed one of the greatest challenges to meeting this need. Across the country, 619 systems face the dual challenge of meeting personnel demands while promoting high standards. This study identified characteristics of the 619 system that impact personnel. The following is a discussion of the major findings based on the responses of the participating 619 representatives.

Local education agencies act as the primary 619 organizational unit in the majority of states while other organizational structures come into play in a few cases.

The majority of states reported stability in their 619 organizational structures although they acknowledged potential threats including funding issues and reorganization that may present challenges. Federal and state funds were consistently reported as primary sources of payment for ECSE services. In addition, Medicaid and local monies were reported with some regularity. Over two-fifths of the respondents viewed their funding as stable while others tempered their view with a caveat of having insufficient funds.

Obtaining specific personnel supply numbers is complicated by the multiplicity of sources that employ personnel within the 619 system, such as private not for profit agencies, state departments, private for profit agencies, and private therapists. Only one-quarter of responding states reported having a centralized personnel database for ECSE service providers. The 619 representatives highlighted specific disciplines with the greatest need for personnel being identified as speech/language pathologists, special educators, occupational therapists, and physical therapists. In some cases, respondents specifically mentioned the challenge of obtaining adequate numbers of trained individuals in rural areas.

While the 619 respondents indicated that professionals were adequately trained specific to their discipline, relatively large numbers expressed uncertainty about the adequacy of training particularly for paraprofessionals (41.7%). In addition, respondents reported concern about personnel being appropriately trained to work specifically with young children with disabilities and their families.

With respect to pre-service personnel preparation, almost all of the participating states report having higher education programs specifically designed to prepare professionals to work in the field of ECSE. However, only one-half of the states reported having a directory of ECSE higher education programs, thus limiting awareness and access to these educational opportunities. Respondents specifically cited the lack of higher education programs as a barrier to obtaining qualified personnel.

As part of training within the system, only a small number of responding states require training specific to ECSE prior to the service provider beginning employment, and approximately one-half of the states require training for ECSE providers during employment. About one-quarter of the states require CEU's relating to the ECSE field. In-service training directories are available in approximately two-thirds of the states. One-third of the states have a career ladder in place that offers recognition for advancement within the field.

Almost two-thirds of the states have or are in the process of developing a certification or credential specific to ECSE with emphasis on teachers. Approximately one-half of participating states offer alternative methods to certification, licensure and credential.

A large percentage of the states address issues of personnel preparation through mechanisms that include State Improvement Plans, Interagency Coordinating Councils, and Interagency Agreements with 619. In approximately one-quarter of the participating states, the CSPD document addresses in-service training for ECSE providers and about one-quarter of the states have a CSPD document describing pre-service opportunities for ECSE providers.

Conclusion

As a way to improve service delivery for young children with disabilities, it was essential that we examined the personnel preparation systems for ECSE across the country. Results from this study will contribute to a better understanding of 619 system organizations, personnel preparation opportunities, and effective ways to obtain qualified personnel that will lead to improved policies and practices.

Appendix A
The Center for Personnel Preparation in Early Intervention/ Early Childhood Special Education

619 Coordinator Web Survey

GREETING

Thank you for agreeing to complete a survey for the Center for Personnel Preparation in Early Intervention/Early Childhood Special Education. This center is a federally funded OSEP project under the direction of 3 co-directors, Mary Beth Bruder at the University of CT, Laurie Dinnebeil at the University of Toledo, and Vicki Stayton at Western KY University.

This is a 5-year program that will study Early Intervention personnel preparation. We will be doing a series of studies that look at states' personnel standards and credentialing along with higher education personnel preparation opportunities.

We appreciate you taking the time to complete this survey. Please complete as much of the survey as possible. If you feel that any of the questions should be answered by one of your colleagues, please indicate that person's name and contact information in the response space.

We have gone through our Institutional Review Board (IRB) for approval of this survey. The information that we are gathering will be available for public information. You may omit any answers that you do not feel comfortable responding to.

Please feel free to call us at anytime if you have any questions while completing this survey. We will also be following up with you by phone to briefly review your responses.

Contact Information:

Deb Bubela bubela@uchc.edu (860) 679-1562

Amy Novotny anovotny@uchc.edu (860) 679-1585

Survey Outline:

- Introductory Questions
  - CSPD Coordinator
  - Web Site Reliability
- Background on the 619 Program
  - 619 Structure
  - Funding
  - Employment
  - State Requirements
- Personnel Requirements
  - Personnel Standards
  - Changes in Personnel Requirements
  - Credential
  - Training Requirements
- Training Information
  - Inservice Training
  - Preservice Training
- Sharing your Knowledge & Experience
  - Barriers & facilitators in obtaining appropriately qualified personnel
  - How our center can assist you

Documents needed for completing survey:

- ❑ Dec. 1 OSEP Counts
- ❑ Interagency Agreement
- ❑ State Improvement Plan
- ❑ Personnel Standards
- ❑ CSPD Document Describing Inservice and Preservice Training
- ❑ Training Directory
- ❑ Directory or List of Higher Ed. Programs

We will also be requesting hard copies of these documents or website URL's where information can be downloaded.

619 Survey

INTRODUCTORY QUESTIONS

COMPREHENSIVE SYSTEM OF PERSONNEL DEVELOPMENT (CSPD) COORDINATOR INFORMATION

1. Who is your 619 CSPD coordinator?

2. In case we have any questions that come up in the course of our project, how could we contact him/her?

Web Site Reliability

3. Because we are using your web site as a resource, we'd like to know if that information is current and accurate.

   ☐ Yes

   ☐ No

   ☐ Unsure

   Additional Comments:

4. How often is your 619 web site updated?

5. What agency or department is responsible for updating your web site?

☼If there are any unanswered Introductory Questions, who can we contact for that information?
Name:
Contact Information:

BACKGROUND ON 619 PROGRAM

619 STRUCTURE

6. a. How stable is the organizational structure within the 619 program?

   b. Are there any threats to the 619 program in your state?

7. How is the 619 system organized in your state? How are services provided?

   ☐ On a county basis

   ☐ Through Local Education Agencies

   ☐ Regional offices

   ☐ Other *Please provide brief description:*

   Additional Comments:

8. How many children does your state's 619 program serve?

FUNDING

9. What is your total 619 budget?

10. a. How do the 619 federal funds get allocated at the local level?

b. What other money is used to fund 619 programs?

c. What are the specific percentages?

Source	☐ Federal	☐ State	☐ Local	☐ Medicaid	☐ Private Insurance	☐ Other
Percent	_ _%	_ _%	_ _%	_ _%	_ _%	_ _%

11. Do you think that the funding is stable?

PERSONNEL

12. Who employs 619 personnel? (check all that apply)

☐ State Department (which one?)
☐ Local Education Agencies
☐ Regional Collaborative Units (ex. Regional Education Service Centers, BOCES)
☐ Private For Profit Agencies
☐ Private Not For Profit Agencies
☐ Private Preschools
☐ Private Not for Profit Preschools
☐ Private Individual Therapists
☐ Other *Please provide brief description:*

13. Are any of these employees unionized?

☐ Yes Which ones?

How does unionization affect EI services?

☐ No
☐ Unsure

Additional Comments:

14. a. How many FTE's (Full Time Equivalents) did you report in your December 1 count to OSEP?

b. How many 619 providers is that?

c. Can you send us your December 1 count information?

15. Do you have a statewide personnel database that you update more regularly than the annual report to OSEP?

☐ Yes

☐ No

☐ Unsure

Additional Comments:

16. a. Are there adequate numbers of personnel across the various disciplines in ECSE? *(Record responses in Personnel Chart.)*

Additional Comments:

b. Do you feel that ECSE personnel are appropriately trained? *(Record responses in Personnel Chart.)*

Additional Comments:

Personnel Chart						
Discipline	**Number**			**Appropriately Trained**		
	Adequate	Shortage	Unsure	Yes	No	Unsure
Special educators	☐	☐	☐	☐	☐	☐
Audiologists	☐	☐	☐	☐	☐	☐
Speech/language pathologists	☐	☐	☐	☐	☐	☐
Occupational therapists	☐	☐	☐	☐	☐	☐
Physical therapists	☐	☐	☐	☐	☐	☐
Orientation/mobility specialists	☐	☐	☐	☐	☐	☐
Pediatricians and other physicians	☐	☐	☐	☐	☐	☐
Nurses	☐	☐	☐	☐	☐	☐
Family therapists	☐	☐	☐	☐	☐	☐
Psychologists	☐	☐	☐	☐	☐	☐
Social workers	☐	☐	☐	☐	☐	☐
Guidance Counselors	☐	☐	☐	☐	☐	☐
Rehabilitation Counselors	☐	☐	☐	☐	☐	☐
Recreation Therapists	☐	☐	☐	☐	☐	☐
Paraprofessionals	☐	☐	☐	☐	☐	☐
Other: (*Explain*)	☐	☐	☐	☐	☐	☐
Other: (*Explain*)	☐	☐	☐	☐	☐	☐
Other: (*Explain*)	☐	☐	☐	☐	☐	☐
Other: (*Explain*)	☐	☐	☐	☐	☐	☐
Other: (*Explain*)	☐	☐	☐	☐	☐	☐

PART C & B INTERAGENCY AGREEMENT

(Answer question 17 only if Part C has a non-educational lead agency.)

17. Does your interagency agreement with Part C address personnel preparation at all?

☐ Yes Can you tell us about that?

Can we get a copy?

☐ No

☐ Unsure

Additional Comments:

OSEP (OFFICE OF SPECIAL EDUCATION PROGRAMS) STATE IMPROVEMENT PLAN

18. Is ECSE and related service personnel preparation addressed in your state improvement plan?

☐ Yes Can you tell us about that?

Can we get a copy?

☐ No

☐ Unsure

Additional Comments:

COMPREHENSIVE SYSTEM OF PERSONNEL DEVELOPMENT (CSPD)

19. How is your CSPD addressing personnel preparation for ECSE and related service personnel?

20. a. Does your state's CSPD have a written document that describes inservice training opportunities for personnel working in early childhood special education?

☐ Yes How can we get a copy of that document?

☐ No

☐ Unsure

Additional Comments:

b. How about for preservice?

☐ Yes How can we get a copy?

☐ No

☐ Unsure

Additional Comments:

INTERAGENCY COORDINATING COUNCIL (ICC)

21. a. Does your ICC have a Personnel Preparation committee?

☐ Yes

☐ No

☐ Unsure

Additional Comments:

b. Who is the personnel preparation representative on the ICC?

c. How can we contact that person?

22. What early childhood special education personnel preparation initiatives is the ICC currently working on?

☼ If there are any unanswered Background Questions who can we contact for that information?
Name:
Contact Information:

STANDARDS, CERTIFICATION, LICENSING AND CREDENTIAL

STANDARDS

23. a. What is the best way for us to obtain a copy of your state's personnel standards?

b. Please review the Personnel Requirement Chart that we have provided for accuracy. Please add any information that we were unable to find about your state's personnel requirements.

619 Personnel Requirement Chart

Service Providers/Disciplines	Meets Highest Minimum	Initial License/Certification				Renewal		Reciprocity	What related tasks are they permitted to do & who can they work with	What related tasks are they not permitted to do & who can they not work with
	X	Degree	Exam	Practicum	Other	CEU's (Discipline/ EI Specific)	Other	X	(e.g. service coordination, evaluations, supervision restrictions, IFSP/IEP development, children in certain age groups, children with certain special needs)	
Related Service Providers										
Audiologist	☐							☐		
Speech/language pathologist	☐							☐		
Occupational therapist	☐							☐		
Physical therapist	☐							☐		
Orientation/mobility specialist	☐							☐		
Pediatricians & other physicians	☐							☐		
Nurse	☐							☐		
Family therapist	☐							☐		
Psychologist	☐							☐		
Social Worker	☐							☐		
Guidance counselor	☐							☐		
Recreation therapy provider	☐							☐		
Rehabilitation therapy provider	☐							☐		

619 Personnel Requirement Chart

Service Providers/Disciplines	Meets Highest Minimum	Initial License/Certification				Renewal		Reciprocity	What related tasks are they permitted to do & who can they work with	What related tasks are they not permitted to do & who can they not work with
	X	Degree	Exam	Practicum	Other	CEU's (Discipline/ EI Specific)	Other	X	(e.g. service coordination, evaluations, supervision restrictions, IFSP/IEP development, children in certain age groups, children with certain special needs)	
Educators										
Early Childhood Special Education	☐							☐		
Special Education	☐							☐		
Early Childhood	☐							☐		
Paraeducators	☐							☐		
Prompt: Has your state created any other professional categories or roles that are not part of the federal requirements that you have created standards for?										
Other Professional Roles										
Other:	☐							☐		
Other:	☐							☐		
Other:	☐							☐		
Other:	☐							☐		

CHANGES IN PERSONNEL REQUIREMENTS

24. In regards to your personnel standards, have there been modifications to existing requirements for any of the specific disciplines? (See Personnel Chart for a list of disciplines.)

☐ Yes
☐ In process
☐ No
☐ Unsure

If 'Yes' answer questions A. – H.
If 'In process' use modified questions A. – H.

Additional Comments:

25. Have you added or created any professional categories that are not part of the federal requirements?

☐ Yes
☐ In process
☐ No
☐ Unsure

If 'Yes' answer questions A. – H.
If 'In process' use modified questions A. – H.

If 'No' skip to question 26.

Additional Comments:

(Questions A. - H. should be answered for each change, addition or created professional role mentioned.)

A. How long has this change been in effect?

(In process: How long have you been working on this change?*)*

B. What was the motivation for this change?

(In process: What is the motivation for this change?)

C. What was the length of time it took to implement this change?

(*In process: Skip.)*

D. Can you tell me about the process your state went through to implement this change?

(In process: Can you tell me about the process you are going through to make this change?*)*

E. Were there barriers to the process? What were they?

(In process: Are there any barriers to the change you're making? What are they?)

F. What helped move the process along?

(*In process:* What is helping to move the process along?)

G. What impact has this change had on the quality of EI personnel?

(In process: Do you think this change will have any impact on the quality of EI personnel?)

H. How has this change affected the numbers of EI personnel?

(In process: Do you think this change will affect the numbers of EI personnel?)

CREDENTIAL

26. Does your state have or are you in the process of developing a certification or credential specific to personnel who work in early childhood special education?

- ☐ Yes — *If 'Yes' answer questions A. – K.*
- ☐ In process of developing credential — *If 'In process' use modified questions A. – K.*
- ☐ No — *If 'No' skip to question 27.*

Additional Comments:

A. Can you tell us about the credential?

(In process: Can you tell us about the credential that you're developing?)

B. How does one qualify for the credential?

(In process: How will one qualify for the credential?)

- ☐ Competencies
- ☐ Exam
- ☐ Preservice preparation
- ☐ Coursework
- ☐ Other: *Explain*

C. Who is required to obtain this credential?

(*In process:* Who will be required to obtain this credential?)

D. Who oversees the credentialing process?

(In process: Who will oversee the credentialing process?)

E. How long has the credential been in effect?

(In process: Skip.)

F. What was the motivation for this credential?

(In process: What is the motivation for this credential?*)*

G. How long did it take your state to implement the credential?

(In process: How long have you been working on developing this credential?)

H. Were there barriers to the process? What are they?

(In process: Have there been any barriers to the process? What are they?)

I. What helped move the process along?

(In process: What is helping to move the process along?)

J. What impact has the credential had on the quality of ECSE and related service personnel?

(In process: Do you think this credential will have any impact on the quality of ECSE and related service personnel?)

K. How has this credential affected the number of ECSE and related service personnel?

(In process: Do you think this credential will affect the numbers of ECSE and related service personnel?)

27. Does your state have any other requirements that are special or different? Are there any additional requirements or specific qualifications beyond the licensure/certification of each professional discipline?

TRAINING AS PART OF PERSONNEL REQUIREMENTS

28. a. Does your state require any specific training for personnel working in early childhood special education before they begin employment? For example, an orientation to the system.

☐ Yes What type of training?

☐ No

☐ Unsure

Additional Comments:

b. Is any specific training required during employment? For example, yearly refresher inservices.

☐ Yes What type of training?

☐ No

☐ Unsure

Additional Comments:

29. Do you require personnel to get continuing education units (C.E.U's) specific to working with preschool age children?

☐ Yes Explain:

☐ No

☐ Unsure

Additional Comments:

30. Is there a career ladder in place to deal with issues related to supply and demand?

For example, is there a way for teachers to advance based on training and performance within the preschool system.

☐ Yes Explain:

What supports does 619 provide to advance through the system?

☐ No

☐ Unsure

Additional Comments:

31. Are there any alternative methods to obtain certification, licensure or credential?

☼If there are any unanswered Standards, Certification, Licensing and Credential Questions, who can we contact for that information?
Name:
Contact Information:

Training Information

32. Do you have a training directory for inservice training opportunities?

☐ Yes Can we get a copy of this?

☐ No

☐ Unsure

Additional Comments:

33. Do you have a directory or list of higher education programs that prepare ECSE and related service providers in your state?

☐ Yes How can we obtain this list?

☐ No

☐ Unsure

Additional Comments:

34. a. Are there any higher education programs that specifically prepare educators and related service providers to work in early childhood special education?

b. What disciplines do the programs prepare?

35. Does your state have a higher education consortium?

☐ Yes Are they addressing ECSE issues?

Who should we contact about the higher ed. consortium?

☐ No

☐ Unsure

Additional Comments:

36. Are there any other agencies in your state that provide training that we haven't talked about yet?

☼If there are any unanswered Training Information Questions who can we contact for that information?
Name:
Contact Information:

619 COORDINATOR INFORMATION

37. How long have you been a 619 coordinator?

38. Can you tell us about your background?

ENDING QUESTIONS

39. What have you found to be the biggest barriers in obtaining personnel who are appropriately qualified to deliver services to preschool children with special needs?

40. What have you found most helpful in obtaining qualified personnel?

41. How could our center best assist you and your state in addressing personnel challenges?

42. Is there any other information about your state or 619 program that you think would contribute to our knowledge of personnel requirements and personnel preparation?

CLOSING

Thank you for your time and your contribution to our study. The information that you'll share will be very helpful in understanding 619 personnel issues so that we can better prepare personnel and ultimately assist families and children. We will take your input into consideration when we develop future plans for our study.

If you have any questions please contact us:

Contact information:	Deb Bubela	bubela@uchc.edu	(860) 679-1562
	Amy Novotny	anovotny@uchc.edu	(860) 679-158

If you have copies of the following documents, we would like to have a copy for our research data.

- ☐ Dec. 1 Counts
- ☐ Interagency Agreement
- ☐ State Improvement Plan
- ☐ Personnel Standards
- ☐ CSPD Document Describing Inservice and Preservice Training
- ☐ Training Directory
- ☐ Directory or List of Higher Ed. Programs

Thanks again.

Appendix B. *Site Assignments by State*.

Western KY University	**University of Toledo**	**University of CT**
Alabama	Alaska	Arizona
Arkansas	California	Colorado
Florida	Delaware	Connecticut
Idaho	Georgia	District of Columbia
Iowa	Illinois	Hawaii
Kentucky	Maine	Indiana
Louisiana	Michigan	Kansas
Mississippi	Missouri	Maryland
Nebraska	Nevada	Massachusetts
New Jersey	New Mexico	Minnesota
North Carolina	North Dakota	Montana
Oklahoma	Ohio	New Hampshire
South Carolina	Oregon	New York
Tennessee	South Dakota	Pennsylvania
Virgin Islands	Utah	Puerto Rico
Wisconsin	Virginia	Rhode Island
	Washington	Texas
	Wyoming	Vermont
		West Virginia

Appendix C. *States Represented in 619 Coordinator Survey Data Analysis.*

State Represented	619 Coordinator	State Represented	619 Coordinator
Alabama	X	New York	X
Alaska	X	North Carolina	X
Arizona	X	North Dakota	X
Arkansas	X	Ohio	X
California	X	Oklahoma	X
Colorado	X	Oregon	X
Connecticut	X	Pennsylvania	X
Delaware	X	Puerto Rico	
District of Columbia	X	Rhode Island	X
Florida	X	South Carolina	X
Georgia	X	South Dakota	X
Hawaii	X	Tennessee	
Idaho	X	Texas	X
Illinois	X	Utah	X
Indiana	X	Vermont	X
Iowa	X	Virginia	X
Kansas	X	Virgin Islands	
Kentucky	X	Washington	X
Louisiana	X	West Virginia	X
Maine	X	Wisconsin	X
Maryland	X	Wyoming	
Massachusetts	X	**TOTAL**	48
Michigan			
Minnesota	X		
Mississippi	X		
Missouri	X		
Montana	X		
Nebraska	X		
Nevada	X		
New Hampshire	X		
New Jersey	X		
New Mexico	X		

Appendix C

THE CENTER TO INFORM PERSONNEL PREPARATION POLICY AND PRACTICE IN EARLY INTERVENTION AND PRESCHOOL EDUCATION

STUDY II DATA REPORT: THE HIGHER EDUCATION SURVEY FOR EARLY INTERVENTION AND EARLY CHILDHOOD SPECIAL EDUCATION PERSONNEL PREPARATION

CDFA # 84.325J

DECEMBER, 2004

Primary Site:

University of Connecticut
A.J. Pappanikou Center
for Excellence in Developmental Disabilities Education, Research, and Service
UConn Health Center – MC 6222
263 Farmington Ave.
Farmington, CT 06030

THE CENTER TO INFORM PERSONNEL PREPARATION
POLICY AND PRACTICE IN EARLY INTERVENTION AND PRESCHOOL EDUCATION

STUDY II PROGRESS UPDATE: THE HIGHER EDUCATION SURVEY FOR EARLY INTERVENTION AND EARLY CHILDHOOD SPECIAL EDUCATION PERSONNEL PREPARATION

Introduction

The Center to Inform Personnel Preparation Policy and Practice in Early Intervention (EI) and Preschool Education was established to collect, synthesize and analyze information related to: (a) certification and licensure requirements for personnel working with infants, toddlers, and preschoolers who have special needs and their families, (b) the quality of training programs that prepare these professionals, and (c) the supply and demand of professionals representing all disciplines who provide both Early Intervention (EI) and Early Childhood Special Education (ECSE) services. Individuals affiliated with this Center will use this information to identify critical gaps in current knowledge, and will design and conduct a program of research at the national, state, institutional and direct provider level to address these gaps. This program of research will yield information vital to developing policies and practices within institutions of higher education and all levels of government.

The Higher Education Survey for Early Intervention and Early Childhood Special Education Personnel Preparation (hereafter referred to as the Higher Education Survey) is a component of the research initiatives from The Center to Inform Personnel Preparation Policy and Practice in Early Intervention and Preschool Education (hereafter referred to as the Center). The need for such an investigation was confirmed by the Center's previous study respondents who expressed concern about the limited number of available professionals and lack of specificity of training relating to children with disabilities, their families and EI/ECSE systems. The Higher Education Survey was developed to investigate pre-service programs offered by institutions of higher education preparing individuals entering each discipline represented in the EI and ECSE systems as required under the Individuals with Disabilities with Education Act (IDEA).

The survey identified several characteristics of higher education programs representing 17 types of professional disciplines in all 50 states. Final study results provide: 1) a description of current personnel preparation program characteristics for those disciplines represented in EI/ECSE, 2) an analysis of the relationship between program characteristics and personnel standards, and 3) an analysis of the relationship between personnel preparation program characteristics and personnel supply and distribution.

One of the objectives of this research study is to compile a comprehensive database of current higher education programs that prepare people to enter the fields of EI/ECSE. Findings from this survey, along with those of the Center's previous study, will provide insight into the relationship between higher education and the supply of service providers. This information will serve as a foundation for future Center initiatives including policy recommendations.

Purpose of the Report

This report focuses on data collected from the Higher Education Survey. The study was designed to obtain comprehensive information relating to higher education programs preparing students to provide the services required under IDEA. Many aspects of higher education programs are described in the survey data including:

7) Admission criteria and recruitment efforts
8) Student body composition
9) Program supports
10) Alignment with licensure and certification requirements

11) Faculty
12) Program goals
13) Instructional methods including field experiences
14) Collaborative efforts
15) Program evaluation
16) Post-graduate activities

This report will synthesize the characteristics of higher education programs representing multiple disciplines that provide the services required under IDEA.

Methodology

Survey Development

The Higher Education Survey is a 62 item instrument developed through the collaborative efforts of experts in the field of early childhood education services. The survey was refined following eight pilot interviews conducted between June 20 and July 11, 2003 with input from higher education program administrators in various disciplines including special education, early childhood education, speech, vision impairment, hearing impairment, occupational therapy, nutrition, and school psychology. Institutional Review Boards provided final approval in December 2003. The survey was designed to be completed primarily on-line, with phone or paper formats being available if chosen by the respondents. See Appendix A for a copy of the paper version of the survey. The on-line survey can be accessed at the following url: www.uconnucedd.org/higheredsurvey/.

The survey was formatted by research assistants at the University of Connecticut into an electronic instrument using Front Page programming, with data collection into Excel and SPSS programs. In June, 2004 the web-based survey was updated using Flash program to improve user access, ease of use, and attractiveness. The survey is divided into four sections to allow transfer of response information to the data management programs and to allow the respondents flexibility in completing the survey.

The survey is being administered exclusively from the University of Connecticut site. University of Connecticut staff provides technical assistance to assure respondents' access and participation.

Survey Sample

The target population consists of administrative representatives, e.g. department chairpersons and program coordinators, in higher education programs representing the services required under IDEA. Various educational degree levels and types of institutions in all 50 states are included in the sample.

In an effort to identify potential study participants, project staff members at the University of Connecticut, Western Kentucky University and the University of Toledo conducted searches of the Integrated Postsecondary Education Data System (IPEDS), the Princeton Review, and national professional associations. The research staff at the three sites identified programs representing all services required under IDEA and developed an electronic file consisting of the contact information for 5,659 potential participants. The data file contains the following fields: program, institution, program administrator, email address, phone, and address. The file is modified as updated information is obtained.

Between December 15, 2003 and January 15, 2004, research staff contacted all potential participants via e-mail explaining the purpose of the study, requesting participation, and providing internet links to access the survey. In response to this first request for participation, 423 respondents submitted at least one section of the survey, with 255 submitting all sections of the survey. In March 2004, a second request for participation was sent via e-mail to those persons who did not respond to the initial request or who partially completed the survey. The demographics of the survey respondents were reviewed to determine if the sample was representative of the population by program and location. The sample represented 19 disciplines in 50 states. Response rates by program ranged from 7.99% in

psychology to 32.24% in occupational therapy. In an effort to recruit additional respondents, targeted personal contact was initiated.

During the months of June through November five trained staff members conducted recruitment calls to program administrators who had not yet responded to previous requests to participate. Throughout all rounds of recruitment, several higher education program representatives contacted Center staff stating that their programs were not appropriate for the survey or there was little relevancy of the survey content to their program. Administrators of nursing and psychology programs most frequently indicated this concern.

To date, 1131 submissions were received: 1035 (91.5%) online, 85 (7.5%) on paper, and 11 (1.0%) by phone. A total of 398 (7.03%) program administrators have notified staff of their refusal to participate with their reasons being lack of time due to other responsibilities, length of survey and misalignment of program with survey intent (Table 1).

Table 1. *Frequency of Contacts and Responses. (n=1131)*

Number of Contacts	Number of Programs Contacted	Number of Respondents	Number of Refusals	Number of No Response
1	448	422	17	9
2	480	410	69	1
3 or More	4731	299	312	4120
Total	5659	1131	398	4130

Data Collection

The study used three methods of data collection: electronic surveys, telephone surveys, and hard copy/paper. As data was submitted electronically, the research staff regularly monitored data files to eliminate any responses submitted in error (e.g. duplicate submissions). Data obtained through phone and paper surveys were entered through the electronic system allowing cumulative ongoing data analysis.

Data Analysis

Sample Composition

This analysis reflects data received as of November 18, 2004. Administrators or faculty members from 1131 programs submitted at least one section of the survey. Survey sections were returned with the following frequency: 1127 respondents returned Section 1, 859 respondents returned Section 2, 787 respondents returned Section 3, and 750 respondents returned Section 4. A total of 746 respondents submitted all four sections of the survey.

This report represents the analysis of the cumulative data submitted with program specific information for selected sections. Respondents were given the option to select 1 of 17 specific program disciplines, blended program or 'other.' The majority of the 'other' programs are Human Development and Family Studies. All of the program options are represented in the data. Table 2 lists the number and percent of respondents representing each program. The percent of respondents per program ranged from 0.3 in Audiology to 22.9 in Nursing.

Table 2. *Frequency and Percent of Survey Responses by Higher Education Program Discipline. (n=1131)*

Discipline	Frequency of responses	Percent
Audiology	3	0.3
Counseling	56	5.0
Early Childhood Education	130	11.5
Early Childhood Special Education	42	3.7
Early Intervention	17	1.5
Education of Hearing Impaired	13	1.1
Education of Visually Impaired	8	0.7
Family therapy	14	1.2
Nursing	259	22.9
Nutrition	24	2.1
Occupational Therapy	59	5.2
Physical therapy	48	4.3
Psychology	115	10.2
Recreation therapy	34	3.0
Social Work	69	6.1
Special Education	86	7.6
Speech	63	5.6
Blended Program	48	4.2
Other	43	3.8
Total	**1131**	**100.0**

All 50 states and the District of Columbia are represented in the sample, with a minimum of 2 programs in Delaware and a maximum of 88 in New York. Response rates for programs were also calculated with respect to state. Response rates by state range from the lowest in Delaware (10.53) to the highest in North Dakota (48.39) (Table 3).

Table 3. *Survey Response Details by State (n=1131).*

State	Programs Contacted	Number of responses	Response Rate	Percent Within Sample
Alabama	132	24	18.18	2.1
Alaska	12	4	33.33	.4
Arizona	72	22	30.56	1.9
Arkansas	84	15	17.86	1.3
California	309	46	14.89	4.1
Colorado	80	16	20.00	1.4
Connecticut	97	17	17.53	1.5
Delaware	19	2	10.53	.2
District of Columbia	42	7	16.67	.6
Florida	166	34	20.48	3.0
Georgia	111	26	23.42	2.3
Hawaii	28	8	28.57	.7
Idaho	39	9	23.08	.8
Illinois	248	39	15.73	3.4
Indiana	164	44	26.83	3.9
Iowa	86	17	19.77	1.5
Kansas	102	26	25.49	2.3
Kentucky	120	26	21.67	2.3
Louisiana	86	13	15.12	1.1
Maine	30	6	20.00	.5
Maryland	107	27	25.23	2.4
Massachusetts	174	28	16.09	2.5
Michigan	155	31	20.65	2.7
Minnesota	117	16	13.68	1.4
Mississippi	61	11	18.03	1.0
Missouri	126	19	15.08	1.7
Montana	29	4	13.79	.4
Nebraska	64	13	20.31	1.1
Nevada	18	4	22.22	.4
New Hampshire	46	7	15.22	.6
New Jersey	107	14	13.08	1.2
New Mexico	47	4	8.51	.4

New York	457	88	19.26	7.8
North Carolina	184	35	19.02	3.1
North Dakota	31	15	48.39	1.3
Ohio	194	35	18.04	3.1
Oklahoma	95	19	20.00	1.7
Oregon	53	12	22.64	1.1
Pennsylvania	398	79	19.85	7.0
Rhode Island	34	10	29.41	.9
South Carolina	108	24	22.22	2.1
South Dakota	33	10	30.30	.9
Tennessee	131	27	20.61	2.4
Texas	385	78	20.26	6.9
Utah	46	17	36.96	1.5
Vermont	29	6	20.69	.5
Virginia	132	27	20.45	2.4
Washington	85	25	29.41	2.2
West Virginia	48	14	29.17	1.2
Wisconsin	124	26	20.97	2.3
Wyoming	14	5	35.71	.4
Total	**5659**	**1131**	**19.99**	**100.0**

Response rates were calculated based on the type of program identified in the original database as indicated by IPEDS and national associations (Table 4). Response rates ranged from 11.79 in psychology to 41.33 for occupational therapy. It should be noted that some respondents classified their programs differently than expected. For example, one respondent referred to her occupational therapy program as an early intervention program, and several respondents identified their programs as being blended, e.g. Early Childhood and Early Childhood Special Education, Speech-Language and Audiology.

Table 4. *Survey Response Rate by Higher Education Program Discipline.*

Discipline	Programs Contacted	Responses Received	Response Rate
Counseling (Marriage & Family, Guidance)	458	66	14.41
Early Childhood Education	714	150	21.01
Education of Hearing Impaired	65	19	29.23
Education of Visually Impaired	23	7	30.43
Nursing	1283	266	20.73
Nutrition	184	27	14.67
Occupational Therapy	150	62	41.33
Physical therapy	194	48	24.74
Psychology (Clinical, Counseling, Developmental, School, and Other Psychology)	1103	130	11.79
Social Work	438	73	16.67
Special Education	571	160	28.02
Speech-Language/Audiology	263	66	25.10
Therapeutic Recreation	113	37	32.74
Other (Human Development and Family Studies)	100	20	20.00
Total	**5659**	**1131**	**19.99**

The targeted recruitment yielded an additional 79 responses across disciplines and states as of November 18, 2004 for a total of 1131 higher education representatives returning at least one section of the survey, yielding an overall response rate of 19.99%.

Respondents were fairly evenly distributed by size of institution which was based on the IPEDS database. The most commonly reported (33.3%) size was the small to mid-range institution (1,000 to 4,999 students) (Table 5). Nearly one-quarter (24.4%) of the respondents resided in the Southeast region of the country (Table 6). Half (50.8%) of the respondents represented public 4 year or above institutions and one-third (32.8%) represented private not-for-profit 4 year or above institutions (Table 7). When reviewing respondents' Carnegie Classifications, one-third (35.9%) were from Masters Colleges and Universities (I and II), and an additional one-third (31.0%) were from Doctoral/Research Universities (Extensive and Intensive) (Table 8).

Table 5. *Frequency and Percent of Respondents by Institution Size. (n =1131).*

Institution Size	Frequency	Percent
Less than 1,000	58	5.1
Between 1,000 and 4,999	377	33.3
Between 5,000 and 9,999	225	19.9
Between 10,000 and 20,000	247	21.8
More than 20,000	220	19.5
Unknown	4	.4
Total	1131	100.0

Table 6. *Frequency and Percent of Respondents by Geographic Region. (n =1131).*

Geographic Region	Frequency	Percent
New England	73	6.5
Mid East	218	19.3
Great Lakes	175	15.5
Plains	116	10.3
Southeast	276	24.4
Southwest	123	10.9
Rocky Mountains	51	4.5
Far West	99	8.8
Total	1131	100.0

Table 7. *Frequency and Percent of Respondents by Institutional Type. (n =1131).*

Institutional Type	Frequency	Percent
Public less than 2 year	1	.1
Public 4 year or above	574	50.8
Public 2 year	173	15.3
Private not-for-profit 4 year or above	371	32.8
Private not-for-profit 2 year	10	.9
NA	2	.2
Total	1131	100.0

Table 8. *Frequency and Percent of Respondents by Carnegie Classification. (n =1131).*

Classification	Frequency	Percent
Doctoral/Research Universities: Extensive	217	19.2
Doctoral/Research Universities: Intensive	133	11.8
Masters Colleges and Universities I	361	31.9
Masters Colleges and Universities II	45	4.0
Baccalaureate Colleges: Liberal Arts	33	2.9
Baccalaureate Colleges: General	91	8.0
Baccalaureate/Associates Colleges	6	.5
Associates Colleges	182	16.1
Specialized Institutions: Theological seminaries	3	.3
Specialized Institutions: Medical schools and medical centers	27	2.4
Specialized Institutions: Other separate health profession schools	5	.4
Specialized Institutions: Schools of engineering and technology	1	.1
Specialized Institutions: Teachers colleges	2	.2
Specialized Institutions: Tribal colleges and universities	2	.2
NA	23	2.0
Total	**1131**	**100.0**

Survey Analysis

Respondent Characteristics

The respondents played various and multiple roles in the program. Of the 1123 participants who responded, 36.4% were program coordinators, 41.4% were faculty members, 39.1% were department chairs, and 5.6% were project directors under a grant funded or endowed project (Table 9).

Table 9. *Frequency and Percent of Survey Respondents' Role(s) in the Program (n =1123)*

Role	Frequency	Percent
Program Coordinator	412	36.4
Faculty member in program	468	41.4
Department Chair	442	39.1
Project Director	63	5.6
Other	127	11.2

The length of time respondents were associated with the program appeared to be evenly distributed and ranged from less than 1 year to over 20 years (Table 10.)

Table 10. *Frequency and Percent of Survey Respondents' Length of Time Associated with the Program (n =1106)*

Length Of Time	Frequency	Percent
Less than 1 year	17	1.5
1-4.9 years	222	20.1
5-9.9 years	268	24.2
10-14.9 years	225	20.3
15-19.9 years	158	14.3
Over 20 years	216	19.5

Program Characteristics

Programs represented in the survey address a variety of age ranges, with the majority (56.0%) taking a life span perspective. Ten percent of the programs represented in the study focus on children between birth and eight years of age. Only 1.2% of the study sample specifically addresses birth to three and 1.4% of the sample specified the three to five year old age range. Respondents who selected "other" typically identified grade levels such as "K-12" or "PK-third grade" (Table 11.)

Table 11. *Frequency and Percent of Respondents by Age-Range the Program Addresses (n =1107)*

Age-ranges	Frequency	Percent
Lifespan	620	56.0
0-3 years	13	1.2
3-5 years	16	1.4
5-8 years	10	.9
0-5 years	43	3.9
0-8 years	111	10.0
0-21 years	80	7.2
3-21 years	33	3.0
5-21 years	62	5.6
Other	119	10.7

Associate, undergraduate and graduate programs are represented in the survey sample (n=1116). Some respondents provided information about multiple levels of programming offered at their institutions. Undergraduate and Masters level programs are fairly equally represented (43.1% and 39.2% respectively). Associate level programs comprise 18.0% of the responses, and doctoral level programs contribute to 8.6% of the overall sample (Table 12).

Table 12. *Frequency and Percent of Respondents by Degree(s) Students Obtain (n =1116)*

Degree	Frequency	Percent
Associates	204	18.0
Undergraduate	488	43.1
Masters	443	39.2
Doctorate	97	8.6
Other	90	8.0

One-quarter (25.0%) of the respondents indicated that their programs offered at least one type of certificate. Of those responding, the vast majority (80.6%) reported that students could obtain state authorized certificates (Table 13).

Table 13. *Frequency and Percent of Respondents by Certificate(s) Students Obtain (n =283)*

Certificate	Frequency	Percent
Sixth Year	21	7.4
National	69	24.4
State Authorized	228	80.6
Institution Authorized	33	11.7

Program Admission Criteria

Respondents (n=1092) provided information on the various criteria used for student admission into their program. Grade Point Average was most commonly used to determine students' entry into the program, with 82.4% of programs identifying this as a criterion. Over half (50.9%) of those responding required a minimum GPA between 2.6 and 3.0. In addition, (16.5%) of the programs require a minimum GPA higher than 3.0. Other criteria used as part of admission requirements include recommendations/letters of reference (54.6%), statement of professional goals (43.9%), standardized test scores (42.6%), and writing samples (38.8%) (Table 14).

Table 14. *Frequency and Percent of Programs Using Admission Criteria (n =1092)*

Admission Criteria	Frequency	Percent
GPA	932	82.4
Recommendation/reference letter	618	54.6
Statement of students professional goals	497	43.9
Standardized tests scores	482	42.6
Writing sample	439	38.8
Interview with student	345	30.5
Experience related to professional program	301	26.6
Preadmission portfolio	298	26.3
Speech/language assessment	83	7.3
Hearing screening test	24	2.1
Other	285	25.2

Composition of Student Population in Programs

The survey requested information about the demographic characteristics of the students within programs. With respect to race and ethnicity, program composition varied from being comprised of 100% white students to being racially diverse. There are a few programs comprised entirely or nearly exclusively of persons from a single ethnic group. For example, Fort Belknap College is a two-year tribal college in Montana and reported that 100% of its students in the Early Childhood program are American Indian or Alaskan Native. Ten programs are comprised of 95% or more black students. Virginia Union University is a historically black university and its blended program is comprised entirely of black students. Five respondents report that their programs are comprised of 95% or more Hispanic students (Texas A. & M. International University (2), Frostberg State University, University of Texas-Pan American, and Loredo Community College). The most prevalent Asian constituent is at the University of Hawaii, with the program being comprised of 84% Asian students. A comparison of means of the demographic data indicates that the majority of programs represented in the survey are comprised primarily of white students (Table 15). It should be noted that these figures reflect national demographic trends for the general U.S. population.

Table 15. *Mean and Standard Deviation of Students Enrolled in Programs by Ethnic Group (n* =1066*)*

Ethnicity	Mean %	Standard Deviation
American Indian or Alaskan Native	1.24	5.07
Asian or Pacific Islander	3.35	7.64
Black or African American	9.78	15.24
Hispanic or Latino	6.37	12.20
White	77.03	24.43

The survey also captured the prevalence of other demographic characteristics as represented in Table 16. The majority of students enrolled in the programs represented in the survey are female and have a permanent residence within 60 miles of the program they attend. Students registered as having a disability are represented in the programs with less frequency than in the general population.

Table 16. *Mean Percent of Demographic Characteristics.*

Demographic Characteristic	Mean %	Standard Deviation
Female *(n=1075)*	86.53	12.51
Part time *(n=1004)*	26.46	31.25
Non-traditional (24 years or older) *(n=1047)*	44.44	33.00
Registered as having a disability *(n=959)*	4.97	8.28
Permanent residence within 60 miles of institution *(n=1013)*	65.14	32.03
Possess emergency credential to teach/practice *(n=868)*	6.86	18.35
Non-resident *(n=661)*	2.28	5.15

Recruitment Efforts

The survey requested information about recruitment strategies for the general student population and targeted audiences. Respondents reported using similar strategies for both groups with the most frequently sighted being disseminating brochures and promotional materials, including information about the program in institutional sponsored recruitment activities, and hosting a website. Targeted recruitment efforts were consistently lower than general recruitment efforts (Table 17). Respondents reporting targeted recruitment efforts described that such efforts typically focused on various ethnic groups, professionals already practicing in the field, and students who have not yet declared a study area.

Table 17. *Frequency and Percent of Programs Using General and Targeted Recruitment Strategies*

Recruitment Strategies	General *(n=1101)*		Targeted *(n=884)*	
	Frequency	Percent	Frequency	Percent
Conduct presentations to high school students	567	51.5	398	45.0
Develop relationships with districts or programs serving children and families	502	45.6	345	39.0
Develop relationships with other institutions	700	63.6	454	51.4
Disseminate brochures or promotional materials to prospective students	967	87.8	622	70.4
Exhibit posters at professional meetings	527	47.9	309	35.0
Host program website	821	74.6	468	52.9
Include information about program in institutional-sponsored recruitment activities	919	83.5	508	57.5
Maintain articulation agreement with 2-year programs	440	40.0	274	31.0
Offer financial support	621	56.4	411	46.5
Other	185	16.8	124	14.02

When respondents were asked to indicate the level of success in recruiting students from underrepresented groups, almost two-thirds (61.5%) of those responding felt they were successful or somewhat successful. Ten percent (10.8%) of respondents reported being unsuccessful in their targeted recruitment efforts (Table 18).

Table 18. *Rating of Program's Success in Recruiting Students from Underrepresented Groups (n =1032)*

Response	Frequency	Percent
Successful	156	15
Somewhat successful	479	46
Somewhat unsuccessful	286	27
Unsuccessful	111	10

Numbers of Students

The survey collected information about the number of students admitted to the program during the 2003-2004 academic year as well as the total program enrollment for that same period (Tables 19 and 20). The majority (71.5%) of programs admitted less than 60 students per year, with the amount fairly equally distributed between 1-14 (22.7%), 15-29 (25.2%), and 30-59 (22.9%). Programs typically reported having less than 60 students (46.1%) enrolled. Those programs with enrollment over 100, tended to be undergraduate general psychology programs.

Table 19. *Frequency and Percent of Students Admitted to Participating Programs During 2003-2004 Academic Year (n =1022).*

Number of Students	Frequency	Percent
More than 150	71	6.9
120-149	27	2.6
90-119	64	6.3
60-89	129	12.6
30-59	234	22.9
15-29	258	25.2
1-14	232	22.7
None	7	.7

Table 20. *Frequency and Percent of Students Enrolled in Participating Programs During 2003-2004 Academic Year (n =1050)*

Number of Students	Frequency	Percent
More than 350	66	6.3
250-349	51	4.9
150-249	125	11.9
100-149	144	13.7
60-99	180	17.1
30-59	246	23.4
1-29	237	22.6
None	1	.1

Respondents also provided information about typical class sizes in lower division courses (introductory courses relating to the field), and in upper division courses (advanced courses with specific field-related content). Class size information is captured in Table 21. While nearly half of the respondents answering this question indicated that this delineation did not apply to their particular program, there is a sense that lower and upper division class size is generally under 60 students.

Table 21. *Frequency and Percent of Programs Reporting Lower Division and Upper Division Course Size During 2003-2004 Academic Year*

Number of Students in Course	Lower Division Courses (n=1039)		Upper Division Courses (n=1026)	
	Frequency	Percent	Frequency	Percent
More than 150	79	7.6	48	4.7
120-149	21	2.0	12	1.2
90-119	32	3.1	22	2.1
60-89	59	5.7	49	4.8
30-59	161	15.5	158	15.4
15-29	168	16.2	221	21.5
1-14	71	6.8	124	12.1
None	28	2.7	10	1.0
Does not apply	420	40.4	382	37.2

Program Support

Respondents were asked to provide information about their sources of funding support. In the majority of the 945 programs for which this information was provided, the institution supplied the primary source of funding support for all program activities (i.e. advisory groups, clinical supervision, community service activities, curriculum materials and resources, instruction, professional development, program evaluation, recruitment materials, and student stipends or scholarships). State support was defined as those funds that were supplied outside of those already allocated through the institutions (i.e. state grants). The state most noticeably contributed (primarily, secondarily or minimally) to student scholarships or stipends in 39.0% of the cases. In other activities, state support was reported less than 22% of the time. Federal support occurred most frequently in conjunction with student scholarships or stipends, with 38.2% of programs reporting some degree of federal support (primary, secondary or minimal) in this area. Federal support was reported in 16.0% of the professional development activities. Examples of federal support sources included Bureau of Health Professions, Carl Perkins Funds, Child Bureau, Department of Education, Department of Health and Human Services-Tribal College Partnership Grant, Department of Labor, Maternal and Child Health, National Institutes of Health, Office of Special Education Programs, Pell Grants, and student loans. (See Appendix B).

Alignment with Licensure and Professional Standards

One of the primary goals of this survey was to determine the relationship between licensure and higher education programming. Of the 1085 respondents who provided information about licensure, 939 (86.4%) indicated that their program led to licensure or certification. When asked if the licensure was related specifically to EI/ECSE, 1073 participants responded with 411 (38.3%) providing an affirmative response. Participants were asked to identify the age range(s) for which licensure or certification applied. Of the 313 participants who responded to the question, 76.99% identified birth to five years, 72.20% identified three to five years, and 58.14% identified birth to three years (Table 22).

Table 22. *Frequency and Percent of Programs that Lead Specifically to Licensure or Certification for Age Groups (n =313)*

Age Group	Frequency	Percent
Birth to three years	182	58.14
Three to five years	226	72.20
Birth to five years	241	76.99

The alignment of programs with state license or certification standards was assessed (Table 23). Of the 1068 respondents who supplied this information, 912 (85.4%) indicated that their program was aligned with the state licensure or certification standards, and 76 (7.1%) reported they were not. The remaining respondents were unsure of the alignment or reported that alignment was not applicable.

Table 23. *Frequency and Percent of Programs that Align with State License or Certification Standards (n=1068)*

	Frequency	Percent
Yes	912	85.4
No	76	7.1
Not Sure	31	2.9
Not Applicable	49	4.6

In addition, respondents (n=1079) gave information about alignment with national specialty professional standards. Nearly two-thirds (65.5%) of those responding noted that their program was aligned with standards (Table 24). These programs aligned with up to four national specialty standards for their respective disciplines, with the majority being closely aligned (Table 25).

Table 24. *Frequency and Percent of Programs that Align with National Specialty Professional Standards (n=1079)*

	Frequency	Percent
Yes	707	65.5
No	277	25.7
Not Sure	49	4.5
Not Applicable	46	4.3

Table 25. *Degree of Alignment with National Specialty Professional Standards (n=1077)*

Number of Professional Standards	Frequency of programs	Closely aligned	Somewhat aligned	Loosely aligned	Not at all aligned
1	664	613	35	4	0
2	271	234	28	3	0
3	108	94	7	2	0
4	34	31	0	1	0

With respect to program accreditation, 1044 respondents provided information. The vast majority (n = 927, 88.79%) reported that their programs were accredited, and a small percent (n = 117, 11.21%) were not accredited. In addition, respondents were asked if their programs were pending any type of accreditation, with 100 (9.58%) responding affirmatively.

Respondents were asked if their programs anticipated any significant changes in the next three years (Table 26). Out of the 1070 respondents who provided answers, 220 (20.56%) reported upcoming changes that included transition to more advanced degrees, restructuring to meet standards, curriculum modification, combining programs, increasing enrollment, and multiple retirements.

Table 26. *Frequency and Percent of Programs Reporting Anticipated Significant Organizational Changes (n=1070)*

	Frequency	Percent
Yes	220	20.56
No	730	68.22
Not sure	120	11.21

Faculty

The number of FTE faculty members per program varied considerably ranging from 0 to 60, with a mean of 7.80 faculty. When examining the data by program, Nursing (12.94), Audiology (12.50), and Social Work (10.33) have the highest average number of FTE faculty. Education of the Hearing Impaired (2.18) programs had the fewest number of FTE faculty in the sample (Table 27).

Table 27. *FTE Faculty by Program. (n =756)*

Programs	Frequency	Min	Max	Mean	SD
Overall	756	0	60.00	7.80	7.71
Audiology	2	6.00	19.00	12.50	9.19
Counseling	35	2.00	15.00	5.52	3.32
Early Childhood Education	86	0	32.00	4.69	5.09
Early Childhood Special Education	33	1.00	21.00	4.34	4.70
Early Intervention	10	1.50	16.00	5.85	4.60
Education of the Hearing Impaired	9	1.20	3.00	2.18	.66
Education of the Visually Impaired	6	1.00	9.00	3.50	3.40
Family Therapy	7	3.00	10.00	5.71	3.03
Nursing	186	1.25	60.00	12.94	10.42
Nutrition	17	1.00	10.00	3.94	2.75
Occupational Therapy	42	1.00	10.00	5.54	2.53
Physical Therapy	34	.70	19.00	9.42	3.71
Psychology	79	.50	31.00	7.13	5.89
Recreation Therapy	21	.30	12.00	3.77	3.17
Social Work	43	2.00	50.00	10.33	10.43
Special Education	55	0	22.00	4.90	4.76
Speech and Language Pathology	37	3.00	23.00	9.20	4.55
Blended Program	28	1.00	20.00	5.85	5.54
Other Program	26	0	31.00	4.21	6.26

Respondents were asked to provide information about the programs' core faculty based on their faculty category (full professor, associate professor, assistant professor, lecturer, clinical, visiting, part-time and other). Details were requested to identify the number of faculty who teach about children 0 to 5 years, supervise field experiences, and have tenure. The average number of courses taught by faculty members was also requested. On average, respondents reported having about three faculty involved in their programs but only one-half of those faculty teach about children birth to five years of age. Programs typically have two faculty members who supervise field experiences. As would be expected, Full Professors are most likely to be tenured with programs averaging 2.48 tenured Full Professors, 2.37 Associate Professors, and 1.30 Assistant Professors. Programs reported that Assistant Professors have higher teaching loads averaging 8.5 courses during the 2003-2004 academic year as compared to 7.76 courses for Associate Professors and 6.57 courses for Full Professors (Appendix C).

Parent Involvement

Respondents were asked if their programs involved parents of children with disabilities. Of the 848 respondents who answered this question, 253 (29.5%) indicated that parents are involved in the program in some manner. When asked a follow-up question regarding the roles parents have in the program, respondents (n=244) most often (31.6%) reported that parents are involved by teaching one or

two course sessions. The majority (65.2%) of participants responding stated that parents played roles beyond the response options offered in the survey including: being members on advisory boards, agreeing to have their child participate in the educational experience, acting as cyber-mentors, participating in panel discussions, accepting observers in their homes, helping plan field experiences, and providing input to course development (Table 28).

Table 28. *Frequency and Percent of Programs Reporting Involvement of Parents of Children with Disabilities in Program (n =244)*

Parental Role in Program	Frequency	Percent
Teach courses	24	9.8
Co-teach courses	29	11.9
Supervise field experience	10	4.1
Co-supervise field experiences	12	4.9
Teach one or two course sessions	77	31.6
Other	159	65.2

There were 223 respondents who identified the types of compensation parents received for their participation in higher education programs. Most often parents volunteer their time (65.0%), about one-quarter (22.4%) receive per diem, and a small percent (10.3%) are given a salary. Other methods of compensation were described in 16.1% of the cases including payment from a grant source, honoraria or small stipends, small gifts, child care and provision of services (Table 29).

Table 29. *Frequency and Percent of Programs Reporting Type of Compensation Provided to Parents of Children with Disabilities for Role in Program (n =223)*

Type of compensation for parents	Frequency	Percent
Per diem	50	22.4
Salary	23	10.3
Volunteer	145	65.0
Other	36	16.1

Program Goals

The survey requested respondents to consider the roles that the program prepares students for upon graduation (n=727). Most commonly, higher education programs prepare students to become direct service providers in their respective disciplines (85.6%). Respondents also felt that programs fairly equally prepared students to assume a variety of other roles including community consultant (31.2%), researcher (30.7%), evaluator (30.1%), and service coordinator (29.0%) (Table 30).

Table 30. *Frequency and Percent of Programs Reporting Type of Roles for Which Program Prepares Students (n =727)*

Roles	Frequency	Percent
Administrator	178	24.5
Direct service provider	622	85.6
Evaluator	219	30.1
Inclusion or community resource consultant	227	31.2
Parent support consultant	185	25.4
Paraprofessional/assistant	91	12.5
Researcher	223	30.7
Service coordinator	211	29.0
Other	158	21.7

When asked what settings programs prepare students to enter, a total of 733 respondents provided information indicating that the majority of programs prepare students to enter schools (76.1%), hospitals (58.1%), and clinics (57.3%) as seen in Table 31. Other settings that students are prepared for include: community services, private practices, private and state funded schools, childcare facilities, long-term and residential facilities, physician offices, and family home care.

Table 31. *Frequency and Percent of Settings for Which Program Prepares Students (n =733)*

Settings	Frequency	Percent
Center-based intervention programs for children with disabilities	392	53.5
Child care programs	309	42.2
Clinics	420	57.3
Community-based programs	283	38.6
Early Head Start/Head Start	321	43.8
Home-based intervention programs	321	43.8
Hospitals	426	58.1
Inclusive preschool programs	326	44.5
Schools	558	76.1
Other	125	17.1

Course Allocation

Respondents were asked to list courses their programs offered with content specific to: Assistive Technology, Families, Inclusion/Natural Environments, Research & Evaluation and Team Process. In addition, respondents were asked to indicate all age levels relevant to EI and ECSE (i.e. 0 to 3, 3 to 5, and 5 to 8) that the identified courses covered. Overall, the respondents most often reported that their programs offered at least one course related to Families (86.43%) and Research and Evaluation (73.59%) (Table 32). On average, programs offer 2.15 courses on Families and 2.08 courses on Inclusion/Natural Environments.

When examining the responses by age level, the data indicate that courses were most likely to focus on 5 to 8 year olds. Students were most likely to have an opportunity to take a course which exposed them to Assistive Technology for 5 to 8 year olds and Families for 3 to 5. Students were least

likely to have a course offering that included content specific to Research and Evaluation for 0 to 3 year olds (Table 33 and 34).

When examining Research and Evaluation by degree level (Tables 35 and 36), students have considerable more opportunities to learn about this topic and how it relates to young children in graduate programs. The number of graduate courses offered on this topic is consistent with Assistive Technology, Inclusion/Natural Environments, and Team Process. Programs most likely to offer courses in these areas were Occupational Therapy (n=44) which had approximately 2.5 courses in each area and a total of almost twelve courses, Early Intervention (n=9) which had almost 2.5 courses in each area and a total of ten courses and Physical Therapy (n=32) which had about 2 courses in each area and a total of nine courses.

Table 32. *Frequency of Programs Offering Courses Focusing on Areas (n=693)*

	Frequency of Programs	Percent of Programs	Mean # of Courses	SD
Assistive Technology	339	48.91	1.77	1.44
Families	599	86.43	2.15	1.66
Inclusion/Natural Environments	410	59.16	2.08	1.53
Research & Evaluation	510	73.59	1.90	1.26
Team Process	445	64.21	2.00	1.47

Table 33. *Frequency and Percentages of Courses Addressing Age Levels (n=693)*

	Frequency of Courses	0 to 3	3 to 5	5 to 8
Assistive Technology	599	424 (70.78)	488 (81.47)	503 (83.97)
Families	1289	1029 (79.83)	1058 (82.08)	1036 (80.37)
Inclusion/Natural Environments	851	532 (62.51)	637 (74.85)	615 (72.27)
Research & Evaluation	969	441 (45.51)	518 (53.46)	636 (65.63)
Team Process	888	475 (53.49)	580 (65.32)	686 (77.25)
Total	4596	2901 (63.12)	3281 (71.38)	3478 (75.67)

Table 34. *Frequency and Percentages of Programs Addressing Age Levels (n=693)*

	Frequency of Programs	0 to 3	3 to 5	5 to 8
Assistive Technology	339	255 (42.57)	287 (47.91)	300 (50.08)
Families	599	487 (37.78)	518 (40.09)	515 (39.95)
Inclusion/Natural Environments	410	291 (34.20)	328 (38.54)	333 (39.13)
Research & Evaluation	510	244 (25.18)	272 (28.07)	283 (29.21)
Team Process	445	249 (28.04)	288 (32.43)	297 (33.45)

Table 35. *Frequency and Respondents Reporting Courses by Age Levels Covered and Area Undergraduate Programs (n=291)*

	Frequency of Courses	0 to 3	3 to 5	5 to 8
Assistive Technology	116	72	90	100
Families	205	161	175	177
Inclusion/Natural Environments	148	102	119	124
Research & Evaluation	185	82	93	94
Team Process	157	74	87	95

Table 36. *Frequency of Respondents Reporting Courses by Age Levels Covered and Area Graduate Programs (n=247)*

	Frequency of Courses	0 to 3	3 to 5	5 to 8
Assistive Technology	129	107	115	115
Families	188	145	160	157
Inclusion/Natural Environments	143	104	112	114
Research & Evaluation	199	102	112	117
Team Process	155	100	116	117

Instructional Strategies

The frequency that programs used various instructional delivery methods was assessed (n=721). As would be expected, the vast majority (95.6%) of respondents reported that their programs offer credits for on-campus courses. One-quarter of the respondents offer off-campus courses (28.2%) and one-third (34.4%) offer web-supported courses (courses that utilize the world-wide web for delivering part of the course content) (Table 36).

When examining responses regarding on-line courses more thoroughly, the data suggest that there is great variability in the number of credits programs offer. The programs with the highest average number of credits reported are Education of the Visually Impaired (20.33), Nursing (15.45), Counseling (13.70), and Blended Programs (13.25). There were no reported on line credits for Audiology or Family Therapy (Table 37).

Table 36. *Frequency and Percent of Programs Reporting Instructional Delivery Methods (n =721)*

Instructional Delivery Method	Frequency	Percent
Credits offered through on-campus courses	689	95.6
Credits offered through off-campus courses	203	28.2
Credits offered through web-supported courses	248	34.4
Credits offered through on-line courses	158	21.9
Credits offered through instructional television	56	7.8
Credits offered as part of weekend college	68	9.4
Credits offered through intensive institutes	61	8.5
Credits offered through correspondence courses	14	1.9
Other	32	4.4

Table 37. *Frequency, Mean and Standard Deviation of Programs that Offer On-line Courses (n =157)*

Programs that Offer On-line Courses	Frequency	Mean	SD
Audiology	0	0	0
Counseling	10	13.70	16.58
Early Childhood Education	20	11.45	15.43
Early Childhood Special Education	5	6.60	3.91
Early Intervention	4	4.50	3.10
Education of the Hearing Impaired	2	11.00	11.31
Education of the Visually Impaired	3	20.33	22.27
Family Therapy	0	0	0
Nursing	37	15.45	16.67
Nutrition	4	3.75	1.50
Occupational Therapy	9	11.11	13.01
Physical Therapy	4	10.25	16.52
Psychology	10	11.40	7.98
Recreation Therapy	4	4.50	1.73
Social Work	7	5.57	2.69
Special Education	22	9.31	10.53
Speech and Language Pathology	4	11.75	9.39
Blended Program	8	13.25	11.29
Other Program	4	9.00	4.24

Respondents were asked how programs deliver instruction about the principles of IDEA and Early Intervention/Early Childhood Special Education practices (Appendix D). Principles/practices and instructional strategies were listed so that respondents could indicate the mode of instruction used to promote students' learning of the various topics. In total, 728 respondents answered some component of the question. The number and percent of programs indicating that they addressed a given topic are listed on the left column of Appendix D. Child development was addressed most frequently by programs (96.6%) and "zero rejection" was addressed by the least number of programs (51.0%). Programs were asked to indicate the instructional strategies they used to address the various principles and practices. Class lecture is clearly the primary instructional strategy used to convey information about principles and practices associated with IDEA. When examining topics covered in class lecture, programs indicated that child development was most commonly addressed (94.1%). Within lecture, zero-rejection policy (44.0%) and assistive technology (60%) were the least addressed issues. Other IDEA principles and practices that were addressed with relatively lower frequency included free appropriate education (62%) and natural environments (63.3%).

Programs reported using field experiences most frequently to address child-focused interventions (77.5%). Field-based activities provided a learning opportunity for students with respect to child development (76.4%) and cultural sensitivity (73.9%).

Independent research was the method of instruction used least frequently, with a maximum of 31.7% of programs utilizing this strategy to promote students' learning of child development. Independent research was used with progressively less frequency for the various other principles and practices presented.

Respondents were provided the opportunity to indicate if other instructional strategies were used in the program. While relatively few respondents (not more than 6.20%) indicated use of additional

types of instruction, some strategies they identified included additional readings, summer institutes, television, videotaped interventions, and online courses.

Specific attention was directed toward field experiences. Of the 765 respondents who provided information for this item on the survey, 250 (32.7%) indicated that the program required mandatory field hours with children with special needs between the ages of birth and five years. More than half (56.8%) of the 739 participants reported that optional field hours were offered to allow students the opportunity to work with children with special needs between birth and five years old.

Field experiences were most commonly offered in schools (77.8%), center-based intervention programs (58.0%), hospitals (57.1%), clinics (55.7%), and child care programs (50.3%) (Table 38).

Table 38. *Frequency and Percent of Programs Offering Field Experience in Various Settings (n =743)*

Field Experience Setting	Frequency	Percent
Center-based intervention programs	431	58.0
Child care programs	374	50.3
Clinics	414	55.7
Community-based programs	253	34.1
Early Head Start/Head Start	357	48.0
Home-based intervention programs	273	36.7
Hospitals	424	57.1
Inclusive preschool programs	360	48.5
Schools	578	77.8
Other	77	10.4

Field Experience

In the survey, field experiences were defined as "course practicum" in which field based instruction occurs as a component of a credit course and "practicum" which are independent, supervised, practical application of discipline content for credit. A total of 651 respondents provided specific information about the field experiences offered in their programs. The number of field experiences per program ranged from 1 to 10 with a mean of 3.7 field experiences per program. Respondents reported a total of 2,411 field experiences divided fairly equally between course practicum (48.32%) and practicum (47.08%) experiences. Required field experiences (86.77%) far out-number optional (5.27%) (Table 39). Most field experiences (71.01%) offer students opportunities to work with children who are with and without disabilities (Table 40).

Table 39. *Frequency and Percent of Field Experiences with Individuals of Various Types of Experiences (n =651)*

Field Experience Types	Frequency	Total Field Experiences	Percent
Course Practicum	382	1165	48.32
Practicum	489	1135	47.08
Required	605	2092	86.77
Optional	73	127	5.27

Table 40. *Frequency and Percent of Field Experiences with Individuals With and Without Disabilities (n =651)*

Disability Status	Frequency	Total Field Experiences	Percent
Only with disabilities	166	442	18.33
With and without disabilities	527	1712	71.01
Without disabilities	36	56	2.32

As indicated in Table 41 field experiences most commonly provide students with the opportunity to interact with children between 5 and 21 years of age (66.94%), followed by 3-5 years of age (60.93%). Field experiences provide opportunities for students to interact with young children between birth and three in approximately one half (49.15%) of the reported experiences.

Table 41. *Frequency and Percent of Field Experiences with Individuals of Various Age Groups (n =651)*

Age Groups	Frequency	Total Field Experiences	Percent
0-3 years	456	1185	49.15
3-5 years	532	1469	60.93
5-21 years	547	1614	66.94
Adult	341	1013	42.02

Respondents were asked to identify the types of experiences their programs used to provide students with opportunities to work with or learn about children between birth and five years of age. The results suggest that students are most likely to learn about this age group through service learning or other volunteer experiences (n=379, 67.2%). In addition, almost half of the respondents (n=266, 47.2%) noted that seminars and workshops were used to inform students (Table 42).

Table 42. *Frequency and Percent of Programs Offering Experiences for Students to Work with Children Birth to Five Years (n =564)*

Type of Experience	Frequency	Percent
Competency achievement	194	34.4
Non-credit courses	47	8.3
Seminars, workshops	266	47.2
Service learning or other volunteer experiences	379	67.2
Other	113	20.0

Programs use a variety of criteria to select field placements, with geographic location being the most frequently selected determining factor (76.9%), followed closely by type of services provided (73.5%), and the licensure status of the cooperating professionals (73.4%) (see Table 43 for additional field site selection criteria). Faculty most commonly select the field placement for the student as indicated in Table 44 (64.5%), and most commonly supervise the students on their field experiences (77.9%) (Table 45).

Table 43. *Frequency and Percent of Programs Using Field Site Selection Criteria (n =564)*

Field Site Criteria	Frequency	Percent
Accreditation status of program	360	54.5
Demographic characteristics of students or clients served in field experiences	443	67.0
Geographic location of program	508	76.9
Licensure status of cooperating professionals	485	73.4
Opportunities for students to work in team settings	389	58.9
Opportunities for students to work with families	384	58.1
Program philosophy	422	63.8
Proximity of program to the institution	453	68.5
Type of services provided	486	73.5
Other	97	14.7

Table 44. *Frequency and Percent of Programs Identifying Role of Person Selecting Field Sites for Students (n =668)*

Who Selects Clinical Field Sites	Frequency	Percent
Faculty	431	64.5
Student	78	11.7
Placement office	59	8.8
Family coordinator	6	.9
Other	94	14.1

Table 45. *Frequency and Percent of Programs Identifying Role of Person who Provides Supervision to Students Engaged in Practicum (n =750)*

Type of Field Site Supervisor	Frequency	Percent
Faculty members	584	77.9
Clinical supervisors employed by the institution	276	36.8
Clinical supervisors not employed by the institution	250	33.3
Other	55	7.3

Cross-disciplinary Collaboration

There were 723 respondents who provided information regarding participation in collaborative activities with the majority (55.0%) responding affirmatively (Table 46). Programs collaborate through a variety of activities; with the most common being students taking courses with students from other disciplines (66.3%). A list of activities and the frequency of programs using such collaborative measures is represented in Table 47.

Table 46. *Frequency and Percent of Programs Collaborating with Other Programs Outside of their Discipline (n =723)*

Collaboration	Frequency	Percent
Yes	398	55.0
No	294	40.7
Not sure	31	4.3
Total	723	100.0

Table 47. *Frequency and Percent of Programs Participating in Cross-disciplinary Activities (n =394)*

Cross-disciplinary Features	Frequency	Percent
Courses are offered and listed jointly across program areas within a college or school	154	39.1
Courses are offered and listed jointly across programs across a college or school	104	26.4
Courses are team taught by instructors from different disciplines or different programs	145	36.8
Students enrolled in the program represent different disciplines	151	38.3
Courses are taken with students from different disciplines	263	66.8
Practicum experiences are supervised by faculty or personnel outside the disciplinary area of the program	110	27.9
Students are placed in practicum setting outside of the program's discipline area	129	32.7
Students across disciplines complete field experiences together	125	31.7
The program's steering committee is comprised of individuals from multiple discipline	109	27.7
Other	44	11.2

When examining collaborative efforts by program, the data reveal some anticipated relationships. For example, two-thirds of the Education of the Hearing Impaired programs (66.6%, n=6) collaborate with Audiology. Similarly, two-thirds of the Occupational Therapy (65.3%, n=26) programs work with Physical Therapy programs and vice versa (68.4%, n=19).

Early Intervention programs are most likely to collaborate with other programs averaging 7.71 cross-disciplinary collaborations. They most frequently associate with Early Childhood Special Education (57.1%, n=7), Psychology (85.7%, n=7), and General Special Education (71.4%, n=7). Speech and Language Pathology programs also collaborate frequently with an average of 5.96 programs. Recreation Therapy programs have the lowest collaboration rate with 2.50 programs.

Programs are most likely to collaborate by allowing students from different disciplines to take courses together. The lone exception is nursing which may be due to the specific nature of the courses. In addition, several programs (most notably Early Intervention, Education of Hearing Impaired, Early Childhood Special Education, Education of Visually Impaired, etc.) have students who represent different disciplines enrolled in their programs. (See Appendix E.)

Program Evaluation

There were 723 programs that provided information about the methods they used to evaluate their program. Performance-based assessment is the most common approach to program evaluations (89.8%), followed by supervisors' evaluation of field experiences (77.6%), and results of licensure examination (72.6%). Table 48 lists frequencies and percents of additional components of program evaluation methods.

Table 48. *Frequency and Percent of Programs by Evaluation Method (n =723)*

Methods	Frequency	Percent
Judgments from community constituents	488	67.5
Performance-based assessment during program	649	89.8
Portfolio evaluation	375	51.9
Results from licensure exams	525	72.6
Results of employer surveys	505	69.8
State reports of graduates' induction year	104	14.4
Structured follow-up interviews or questionnaires with graduates	444	61.4
Student completion of exit requirements	511	70.7
Supervisor evaluation during field experience	561	77.6
Other	71	9.8

Program Completion and Post-Graduate Activities

When asked if their states require professionals to complete an induction year, 559 respondents provided information with less than one-quarter (22.0%) indicating that this was a requirement. Of the 201 who provided information about their institution's role in the induction year, only 56 (27.9%) indicated that they played an active part in their students' initiation into their respective fields.

Based on information from 706 respondents, the vast majority of students find jobs in their respective fields. Percentages of programs in the sample that indicated students find jobs ranged from 81.9% for psychology to 100.0% for audiology with an average percent of 93.1%. On average, respondents (n=612) reported that less than one-quarter (20.59%) of their students find jobs working primarily with children with special needs between the ages of birth and five years after completing the program. The relatively high percent of graduates from Early Childhood Special Education (72.37%) and Early Intervention (50.33%) programs may indicate that the concentration on age range may yield greater numbers of professionals who will work with young children. Those programs that focus on a life span perspective produce overall fewer graduates who will eventually work with young children (Table 49). The majority of the respondents (81.8%, n=554) indicated that students typically find employment within the region assigned to their institutions.

Table 49. *Frequency, Mean Percent and Standard Deviation of Programs Reporting Students Who Find Jobs Working With Children With Special Needs (n=612)*

Programs	Frequency	Mean	SD
Overall	612	20.59	27.64
Audiology	2	12.50	17.67
Counseling	35	5.23	6.92
Early Childhood Education	73	17.49	22.51
Early Childhood Special Education	30	72.37	33.90
Early Intervention	9	50.33	38.74
Education of the Hearing Impaired	6	22.00	16.72
Education of the Visually Impaired	6	10.67	8.04
Family Therapy	5	7.00	10.36
Nursing	127	8.02	14.30
Nutrition	13	2.46	3.12
Occupational Therapy	30	30.27	21.07
Physical Therapy	32	12.38	14.46
Psychology	63	13.32	17.74
Recreation Therapy	14	26.14	33.75
Social Work	34	17.21	22.33
Special Education	52	17.15	26.66
Speech and Language Pathology	34	35.94	21.54
Blended Program	26	46.35	37.18
Other Program	21	38.05	41.27

Appendix A

Center to Inform Personnel Preparation Policy and Practice In Early Intervention and Preschool Education

Higher Education Survey for Early Intervention (EI) and Early Childhood Special Education (ECSE) Personnel Preparation

Thank you for taking the time to complete this questionnaire.

Purpose: The purpose of this survey is to compile a comprehensive database of current higher education programs that prepare people to enter the fields of EI/ECSE. This is one of a series of studies conducted under the U.S. Department of Education, Office of Special Education Programs through the Center to Inform Personnel Preparation Policy and Practice in Early Intervention and Preschool Education.

Participation: Your participation in this survey is voluntary and you may refuse to participate and/or discontinue participation at any time without any consequences.

Duration of Participation: The survey should take approximately one hour to complete. Project staff may call to request additional information.

Use of Results: The information gathered will be available to the public.

Costs and Benefits: There is no risk to participants and the participants will incur no cost. The only benefit to the participants is the inherent contribution of information to research intended to advance personnel preparation programming and the fields of Early Intervention and Early Childhood Special Education.

Principal Investigator: The Center to Inform Personnel Preparation Policy and Practice in Early Intervention and Preschool Education is a federally funded OSEP project under the direction of Mary Beth Bruder, Ph. D. at the University of Connecticut.

Contact Information: Sara Wakai, Project Coordinator, 860-679-1514, swakai@uchc.edu.

Institutional Review Board: The University of Connecticut Institutional Review Board (IRB) has approved this project. You may contact the IRB at 860-679-3054 for additional information.

Center to Inform Personnel Preparation Policy & Practice in
Early Intervention and Preschool Education

Higher Education Survey for
Early Intervention and Early Childhood Special Education Personnel Preparation

BACKGROUND INFORMATION

Name of Institution: Date Completed:

Name of Person Completing Survey: _____

Title of Person Completing Survey: _____

Respondent Address: _____

_____

_____

Daytime Phone: _____ Fax: _____ Email: _____

Please check the personnel preparation program that will be described in this survey.

- ❑ Audiology
- ❑ Counseling (Including school and guidance counseling)
- ❑ Early childhood education (Children B-8 without disabilities)
- ❑ Early childhood special education (Children 3-5 with delays or disabilities)
- ❑ Early Intervention (Children B-3 with delays, disabilities, or who are at risk)
- ❑ Education of hearing impaired
- ❑ Education of visually impaired
- ❑ Family therapy
- ❑ Nursing
- ❑ Nutrition
- ❑ Occupational therapy
- ❑ Orientation and mobility
- ❑ Pediatrics
- ❑ Physical therapy
- ❑ Psychology (Including school psychology and developmental psychology)
- ❑ Recreation therapy or Adapted physical education
- ❑ Rehabilitation counseling
- ❑ Social work
- ❑ Special education
- ❑ Speech/language pathology
- ❑ Blended program (Please describe by providing the definition of blended program and the disciplines involved.) _____
- ❑ Other (please describe): _____

1. Please check the age ranges that the program addresses.
   - ❑ Life span
   - ❑ 0-3
   - ❑ 3-5
   - ❑ 5-8
   - ❑ 0-5
   - ❑ 0-8
   - ❑ 0-21
   - ❑ 3-21
   - ❑ 5-21
   - ❑ Other (please describe): _____

2. a. Please select the degree obtained by students completing the program described in this survey.
   - ❑ Associate (2-year)
   - ❑ Undergraduate
   - ❑ Masters
   - ❑ Doctorate
   - ❑ Other (please describe): _____

   b. Please select any certificates obtained by students completing the program described in this survey. (Select all that apply.)
   - ❑ Sixth year (education)
   - ❑ National certificate
   - ❑ State authorized certificate
   - ❑ Institution authorized certificate

3. What was the <u>total enrollment of the institution</u> during the 2003-2004 academic year?
   _____ students

4. Please check the term below that best describes the <u>system</u> under which the institution operates:
   - ❑ Semesters (16 weeks)
   - ❑ Quarters (10 weeks)
   - ❑ Trimesters (_____weeks)
   - ❑ Other (please describe): _____

5. Please check the boxes that describe your role in this program.
   - ❑ Program coordinator
   - ❑ Faculty member in program
   - ❑ Department chair
   - ❑ Project director (grant funded or endowed project)
   - ❑ Other (please describe): _____

6. How long have you been associated with this program?
   - ❑ Less than 1 year
   - ❑ 1-4.9 years
   - ❑ 5-9.9 years
   - ❑ 10-14.9 years
   - ❑ 15-20 years
   - ❑ Over 20 years

OPERATIONAL CHARACTERISTICS OF PROGRAM

Admission

7. What are the criteria used to admit students to the program you are describing in this survey? Check all that apply.
   - ❑ Completion of speech/language assessment
   - ❑ GPA (Select minimum GPA required)
     - ❑ No Minimum
     - ❑ Less than 2.0
     - ❑ 2.0-2.4
     - ❑ 2.5-2.9
     - ❑ 3.0-3.4
     - ❑ Higher than 3.5
   - ❑ Past experience related to professional program
   - ❑ Results of hearing screening test
   - ❑ Results of interview with student
   - ❑ Review of preadmission portfolio
   - ❑ Review of recommendation/reference letters
   - ❑ Review of writing sample
   - ❑ Scores from standardized tests
     - ❑ Minimum ACT score_____
     - ❑ Minimum SAT score_____
     - ❑ Minimum PPST (PRAXIS) reading scores_____
     - ❑ Minimum PPST (PRAXIS) writing scores_____
     - ❑ Minimum PPST (PRAXIS) math scores_____
     - ❑ Other (please describe): _____
   - ❑ Statement of student's professional goals
   - ❑ Other (please describe): _____

8. Please estimate the percent of students from the following ethnic or racial groups that are currently enrolled in the program **(the sum of entries should not exceed 100%):**
   _____% American Indian and Alaskan Native
   _____% Asian or Pacific Islander
   _____% Black non-Hispanic
   _____% Hispanic
   _____% White

9. Please estimate the percent of students currently in the program for each of the following demographic characteristics
   _____% female
   _____% part-time
   _____% non-traditional (students 24 years of age and older)
   _____% registered with the university/program as having a disability
   _____% permanent residence is within a 60 mile radius of the institution
   _____% has an emergency credential to teach/practice and are working toward a full credential
   _____% non-resident alien

10. Please describe the GENERAL recruitment strategies that your program uses to recruit students. Check all that apply.
    - ❑ Conduct presentations to high school students
    - ❑ Develop relationships with districts or programs serving children and families
    - ❑ Develop relationships with other institutions (e.g., develop a pipeline from one program to another)
    - ❑ Disseminate brochures or promotional materials that describe the program to prospective students
    - ❑ Exhibit posters at professional meetings
    - ❑ Host a website specific to the program
    - ❑ Include information about the program in institution-sponsored recruitment activities and materials
    - ❑ Maintain articulation agreements with 2-year programs
    - ❑ Offer financial support to include students
    - ❑ Other (please describe): _____

11. Describe TARGETED recruitment strategies that the program uses to recruit specific groups of students (e.g., students from underrepresented groups; practicing professionals) into the personnel preparation program. Check all that apply and identify the target audience.

	Target Audience
❑ Conduct presentations to high school students	_____
❑ Develop relationships with districts or programs serving children and families	_____
❑ Develop relationships with other institutions (e.g., develop a pipeline from one program to another)	_____
❑ Disseminate brochures or promotional materials that describe the program to prospective students	_____
❑ Exhibit posters at professional meetings	_____
❑ Host a website specific to the program	_____
❑ Include information about the program in institution-sponsored recruitment activities and materials	_____
❑ Maintain articulation agreements with 2-year programs	_____
❑ Offer financial support to include students	_____
❑ Other (please describe): _____	_____

12. How successful has the program been in recruiting students from underrepresented groups?
    - ❑ Unsuccessful
    - ❑ Somewhat unsuccessful
    - ❑ Somewhat successful
    - ❑ Successful

13. How many new students were admitted into the program during the 2003-2004 academic year?
    - ❑ None
    - ❑ 1-14
    - ❑ 15-29
    - ❑ 30-59
    - ❑ 60-89
    - ❑ 90-119
    - ❑ 120-149
    - ❑ More than 150

14. How many students in total were enrolled in the program during the 2003-2004 academic year?
    - ❑ None
    - ❑ 1-29
    - ❑ 30-59
    - ❑ 60-99
    - ❑ 100-149
    - ❑ 150-249
    - ❑ 250-349
    - ❑ More than 350

15. What was the average number of students enrolled in a Lower Division (e.g., Introduction to the Field) personnel preparation course during the 2003-2004 academic year?
    - ❑ Does not apply
    - ❑ None
    - ❑ 1-14
    - ❑ 15-29
    - ❑ 30-59
    - ❑ 60-89
    - ❑ 90-119
    - ❑ 120-149
    - ❑ More than 150

16. What was the average number of students enrolled in an Upper Division (e.g., Methods for Working with Young Children) personnel preparation course during the 2003-2004 academic year?
    - ❑ Does not apply
    - ❑ None
    - ❑ 1-14
    - ❑ 15-29
    - ❑ 30-59
    - ❑ 60-89
    - ❑ 90-119
    - ❑ 120-149
    - ❑ More than 150

Program Support

17. Please indicate the level of financial support provided by institutional, state, federal, private and other resources for the program activities listed in the chart. Use "A", "B", "C", "D", or "E" as described below to indicate the appropriate level of support. ***Every box should contain the most appropriate letter.***

    A = Primary source of support
    B = Secondary source of support
    C = Minimal support
    D = No support
    E = Not applicable

    For state funded colleges/universities, include regular, ongoing state support in the institutional program support column. Only enter special state funding (e.g., contracts, grants) in the state column.

Program Activity	Institutional program support level (include state general funding)	State support level (other than Institutional)	Federal support level	Private support level	Other support (describe)
Advisory groups					
Clinical supervision					
Community service activities					
Curriculum materials/resources					
Distance education					
Instruction					
Professional development					
Program evaluation					
Recruitment materials					
Student scholarships/stipends					
Other (describe):					

If you identified federal sources for any of the activities described above, please identify these funding sources/agencies:

_____

_____

Alignment with Licensure and Certification Requirements

18. Does the program described in this survey lead to either licensure or certification?
    - ❑ Yes
    - ❑ No (skip to question 24)

19. Does the program lead to either licensure or certification required to work with children with special needs between the ages of birth and 5 years of age?
    - ❑ Yes
    - ❑ No

20. Does the program lead to either licensure or certification required to work specifically with children aged:

Birth to Three:	❑Yes	❑No
Three to Five:	❑Yes	❑No
Birth to Five:	❑Yes	❑No

21. Please check the box that describes the degree level at which students can obtain an initial professional license or certification in your state.
    - ❑ Undergraduate
    - ❑ Graduate
    - ❑ Associate (2-year)
    - ❑ Other (please describe): _____

22. In what year was the licensure or certification associated with the program first approved by the state? _____

23 In what year did the licensure or certification associated with the program most recently receive state approval? _____

Specialty Personnel Standards

24. a. Is the program accredited?
    - ❑ Yes
        By what accrediting agency(ies)? _____
    - ❑ No

    b. Is the program pending accreditation?
    - ❑ Yes
        By what accrediting agency(ies)? _____
    - ❑ No

25. Is the program aligned with state license or certification standards for professional preparation?
    - ❑ Yes
    - ❑ No
    - ❑ Not sure
    - ❑ Not applicable

26. Is the program aligned with national specialty professional standards (e.g., American Occupational Therapy Association, American Physical Therapy Association, American Speech and Hearing Association, Council for Exceptional Children)?
    - ❑ Yes
    - ❑ No (skip to question 28)
    - ❑ Not sure (skip to question 28)
    - ❑ Not applicable (skip to question 28)

27. Please identify the national specialty professional standards to which the program is aligned.
Place an 'X' in the box that best indicates the degree to which the program is aligned with these standards.

Professional standards	Closely aligned	Somewhat aligned	Loosely aligned	Not at all aligned
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐

28. Does the program anticipate any significant organizational changes within the next three years?

- ❑ Yes (please describe): _____
- ❑ No
- ❑ Not sure

Faculty

29. How many FTE faculty are in the specific program described in this survey? _____

30. Indicate the number of <u>core</u> program faculty who are in each of the categories listed below.
(Please enter numeric values only.)

Faculty category	Number of faculty involved in program	Number of faculty who teach about children 0-5	Number of faculty who supervise field based experiences	Number of tenure track positions		Number of non-tenure track positions	Avg. # of courses taught per faculty during 2003-2004
				Tenured	Not yet tenured		
Full professor							
Associate professor							
Assistant professor							
Clinical/Lecturer							
Visiting/full-time							
Part-time							
Other:							

31. How many additional faculty teach courses in the program? *(Numeric value only)* _____

32. Do parents of children with disabilities have a role in the program?

- ❑ Yes
- ❑ No (skip to question 35)

33. What role do parents of children with disabilities have in the program? *(Check all that apply.)*
    - ❑ Teach courses
    - ❑ Co-teach courses
    - ❑ Supervise field experience
    - ❑ Co-supervise field experiences
    - ❑ Teach one or two course sessions
    - ❑ Other (please describe): _____

34. How are parents compensated for their role in the program? *(Check all that apply.)*
    - ❑ Paid per diem
    - ❑ Paid salary
    - ❑ Not paid, volunteer
    - ❑ Other (please describe): _____

PROGRAM CHARACTERISTICS

Program Goals

35. Please check <u>all</u> of the boxes below that describe the <u>roles</u> for which the program prepares students.
    - ❑ Administrator
    - ❑ Direct service provider (i.e., someone who works directly with children and/or families such as a therapist, classroom teacher, or home visitor)
    - ❑ Evaluator
    - ❑ Inclusion or community resource consultant
    - ❑ Parent support consultant
    - ❑ Paraprofessional/Assistant
    - ❑ Researcher
    - ❑ Service coordinator
    - ❑ Other (please describe): _____

36. Please check <u>all</u> of the boxes below that describe <u>the settings</u> for which the program prepares students.
    - ❑ Center-based intervention programs for children with disabilities
    - ❑ Child care programs
    - ❑ Clinics
    - ❑ Community-based programs (playgroups, Gymboree, library)
    - ❑ Early Head Start/ Head Start
    - ❑ Home-based intervention programs
    - ❑ Hospitals
    - ❑ Inclusive preschool programs
    - ❑ Schools
    - ❑ Other (please describe): _____
    - ❑ Other (please describe): _____

Course Credit Allocation

37. How many academic credits must students complete to finish the program of study (not the degree program)? *(Please enter numeric value.)*
    _____Academic credits are needed to complete program

38. Of these credit hours, how many are associated with coursework? *(Please enter numeric value.)*
    _____Credits associated with coursework

39. How many credits are associated with any type of field experience or practicum? *(Please enter numeric value.)*
    _____Credits associated with field experiences

40. Please list courses offered in the program that have titles and content specific to the areas listed. Then fill in the applicable credit hours and check all age levels covered in the course.

Areas	*Course Name (please list all)*	*Credits*	*Age level covered (please check all that apply)*		
			0-3	3-5	5-8
Assistive technology			❑	❑	❑
			❑	❑	❑
			❑	❑	❑
Families			❑	❑	❑
			❑	❑	❑
			❑	❑	❑
Inclusion/natural environments			❑	❑	❑
			❑	❑	❑
			❑	❑	❑
Research and Evaluation			❑	❑	❑
			❑	❑	❑
			❑	❑	❑
Team Process			❑	❑	❑
			❑	❑	❑
			❑	❑	❑

Instructional Methods

41. Please indicate the number of credits within the program that were offered through the following instructional delivery methods during the 2003-2004 academic year.

    _____ Credits offered through on-campus courses
    _____ Credits offered through off-campus courses
    _____ Credits offered through web-supported courses (courses that utilized the world-wide web for delivering part of the course content)
    _____ Credits offered through online courses (courses that utilized the world-wide web for delivering all of the course content)

_____ Credits offered through instructional television
_____ Credits offered as part of weekend college
_____ Credits offered through intensive institutes (e.g., summer institutes)
_____ Credits offered through correspondence courses
_____ Other (please describe): _____

42. How do students in the program learn about the following principles of the Individuals with Disabilities Education Act (IDEA) and Early Intervention/Early Childhood Special Education professional practice?
Put an "X" in each box that describes ways in which students learn about these principles and practices. You may check more than one box for each principle.

Principles and Practices	Independent research	Class lecture	In-Class simulations	Field experiences	Other (describe below)
Assessment models	☐	☐	☐	☐	
Assistive technology	☐	☐	☐	☐	
Child development	☐	☐	☐	☐	
Child focused interventions	☐	☐	☐	☐	
Cultural and linguistic sensitivity	☐	☐	☐	☐	
Due process	☐	☐	☐	☐	
Family-centered practices	☐	☐	☐	☐	
Family involvement	☐	☐	☐	☐	
Free Appropriate Public Education (FAPE)	☐	☐	☐	☐	
Individualized Educational Program (IEP)	☐	☐	☐	☐	
Individualized Family Service Plan (IFSP)	☐	☐	☐	☐	
Instructional planning	☐	☐	☐	☐	
Learning environments	☐	☐	☐	☐	
Least Restrictive Environment (LRE)	☐	☐	☐	☐	
Multi-faceted assessment	☐	☐	☐	☐	
Natural environments	☐	☐	☐	☐	

Principles and Practices	Independent research	Class lecture	In-Class simulations	Field experiences	Other (describe below)
Professional and ethical practice	☐	☐	☐	☐	
Teaming process	☐	☐	☐	☐	
Zero rejection	☐	☐	☐	☐	

Field Experiences

43. Does the program require mandatory field hours that focus on working with young children with special needs between the ages of birth and five years?
    - ❑ Yes
    - ❑ No (skip to question 45)
    - ❑ Not sure (skip to question 45)
    - ❑ Not applicable

44. What are the number of clock hours and credit hours associated with mandatory fieldwork related to young children with special needs between the ages of birth and five?
    _____ Clock hours
    _____ Credit hours

45. Does the program offer optional field hours that focus on work with young children with special needs between the ages of birth and five years?
    - ❑ Yes
    - ❑ No
    - ❑ Not sure
    - ❑ Not applicable

46. Please check all of the boxes below that describe the field experience settings for the program.
    - ❑ Center-based intervention programs for children with disabilities
    - ❑ Child care programs
    - ❑ Clinics
    - ❑ Community-based programs (playgroups, Gymboree, library)
    - ❑ Early Head Start/ Head Start
    - ❑ Home-based intervention programs
    - ❑ Hospitals
    - ❑ Inclusive preschool programs
    - ❑ Schools
    - ❑ Other (please describe): _____

47. Institutions use different terminology to describe hands-on clinical application of learning in the field. Using the following distinctions for clinical fieldwork, please describe these field experiences offered as part of the program.

    Course Practicum - a component of a credit course that requires students to complete work or make observations in the field.
    Practicum - an independent, supervised, practical application of discipline content for credit.

Using the chart below, please describe:

2) Name of the field experience (e.g. advanced practicum, field affiliation and student teaching.)
3) Number of clock hours spent in this field experience
4) Credits received for this field experience
5) Term by which fieldwork is typically completed. Define 'term' in the box below.

Please select the academic calendar term your program is based on:

- ❑ Quarter
- ❑ Semester
- ❑ Trimester
- ❑ Years
- ❑ Other (please describe)_____

Please indicate the total number of terms the program consists of: _____

(*Please enter a numeric value in the chart's 'term of completion' column. For example, enter '3' if the field experience is completed during the third semester the student is in the program.)

Please complete the chart by putting an 'X' in the boxes that indicate the appropriate field experience, level of requirement, age range of people with whom students work, and the ability status of people with whom students work.

48. Please check any of the following experiences that provide students with the opportunity to work with/learn about children between birth and five years of age within the program.
    - ❑ Competency achievement
    - ❑ Non-credit courses
    - ❑ Seminars, workshops
    - ❑ Service learning or other volunteer experiences
    - ❑ Other (please describe): _____

Name of field experience	Number of clock hours	Number of credits	*Term of completion	Type		Requirement		Age Range				Person's Ability Status		
				Course Practicum	Practicum	Required	Optional	0-3	3-5	5-21	Adult	Only disabilities	With & without disabilities	Only without disabilities
1.				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
2.				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
3.				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
4.				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
5.				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
6.				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
7.				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
8.				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
9.				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
10.				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

49. Please check all of the criteria used to select field sites for any course practicum or independent practicum.
    - ❑ Accreditation status of program
    - ❑ Demographic characteristics of students or clients served in field experiences (e.g., race or ethnicity, ability levels)
    - ❑ Geographic location of program (e.g., urban vs. rural)
    - ❑ Licensure status of cooperating professionals
    - ❑ Opportunities for students to work in team settings
    - ❑ Opportunities for students to work with families
    - ❑ Program philosophy
    - ❑ Proximity of program to the institution
    - ❑ Type of services provided (e.g., classroom-based, clinic, home-based)
    - ❑ Other (please describe): _____

50. In general, <u>who selects</u> clinical field sites (course practicum or independent practica) for students? Check one box.
    - ❑ Faculty
    - ❑ Student
    - ❑ Placement Office
    - ❑ Family Coordinator
    - ❑ Other (please describe): _____

51. In the program, <u>who provides supervision</u> to students engaged in practicum? Check all of the boxes that best describes who provides supervision and indicate the average number of clock hours and credit hours per practicum.
    - ❑ Faculty members ____Clock hours ____Credit hours
    - ❑ Clinical supervisors employed by the institution ____Clock hours ____Credit hours
    - ❑ Clinical supervisors not employed by the institution ____Clock hours ____Credit hours
    - ❑ Other (please describe): _____ ____Clock hours ____Credit hours

Cross-disciplinary Collaboration

52. Does the program collaborate with other programs <u>outside</u> of the discipline(s) to offer cross-disciplinary courses or practica for the students?
    - ❑ Yes
    - ❑ No (skip to question 55)
    - ❑ Not sure (skip to question 55)

53. Please check the boxes next to the disciplines or programs with whom you collaborate:

- ❑ Audiology
- ❑ Counseling (Including school and guidance counseling)
- ❑ Early childhood education (Children B-8 without disabilities)
- ❑ Early childhood special education (Children 3-5 with delays or disabilities)
- ❑ Early Intervention (Children B-3 with delays or disabilities, or who are at risk)
- ❑ Education of hearing impaired
- ❑ Education of visually impaired
- ❑ Family therapy
- ❑ Nursing
- ❑ Nutrition
- ❑ Occupational therapy
- ❑ Orientation and mobility
- ❑ Pediatrics
- ❑ Physical therapy
- ❑ Psychology (Including school psychology and developmental psychology)
- ❑ Recreation therapy (Including adaptive physical education)
- ❑ Rehabilitation counseling
- ❑ Social work
- ❑ Special education
- ❑ Speech/language pathology
- ❑ Blended program (Please describe by providing the definition of blended program and the disciplines involved.) _____

Other (please describe): _____

54. Below please find examples of <u>cross-disciplinary features of programs</u>. Please check <u>any</u> that apply to the program.

- ❑ Courses are offered and listed jointly across program areas within a college or school
- ❑ Courses are offered and listed jointly across program areas across colleges or schools
- ❑ Courses are team taught by instructors from different disciplines and/or different programs
- ❑ Students enrolled in the program represent different disciplines
- ❑ Courses are taken with students from different disciplines
- ❑ Practicum experiences are supervised by faculty or personnel outside the disciplinary area of the program
- ❑ Students are placed in practicum settings outside of the program's discipline area (e.g., child care setting)
- ❑ Students across disciplines complete field experience together
- ❑ The program's steering committee is comprised of individuals from multiple disciplines
- ❑ Other (please describe): _____

PROGRAM EVALUATION

Evaluation Methods

55. Below please find a list of ways that program faculty may evaluate the quality of their personnel preparation program. Please put a check next to each box that describes a way in which you or your colleagues evaluate the quality of the program.
    - ❑ Judgments from community constituents
    - ❑ Performance-based assessment during program (e.g., during field experience)
    - ❑ Portfolio evaluation
    - ❑ Results from licensure exams
    - ❑ Results of employer surveys
    - ❑ State reports of graduates' induction year
    - ❑ Structured follow-up interviews or questionnaires with graduates
    - ❑ Student completion of exit requirements
    - ❑ Supervisor evaluation during field experience
    - ❑ Other (please describe): _____

PROGRAM COMPLETION AND POST-GRADUATE ACTIVITIES

56. How long does it usually take full-time students following the recommended schedule to complete the program? *(Please enter numeric value.)* _____ years

57. What percent of students admitted to the program finish it? _____%

58. Does the state require that beginning professionals complete an induction year experience?
    - ❑ Yes
    - ❑ No
    - ❑ Not sure

59. Does the institution play a role in the beginning professional's induction year?
    - ❑ Yes
    - ❑ No
    - ❑ Not sure

    If yes, please describe that role:

    _____

    _____

60. What percent of students find jobs in their field after completing the program? *(Please enter numeric value.)* _____%

61. What percent of students find jobs working primarily with children with special needs between the ages of birth and 5 years after completing the program? *(Please enter numeric value.)* _____%

62. Check the box that best describes where students find jobs after they graduate:

- ❑ Most graduates of the program are employed within the assigned geographic region that the institution serves
- ❑ Most graduates of the program are employed outside of assigned geographic region that the institution serves

Please provide any additional comments you may have regarding your program or the survey in the space below.

Thank you for your time in completing this survey. The information you have shared will provide us with a greater understanding of the higher education programs that prepare people to enter the fields of early intervention and early childhood special education. We sincerely appreciate your thoughtful responses and your contribution to our research efforts.

Please return to:

Amy Novotny
Center to Inform Personnel Preparation Policy & Practice in Early Intervention & Preschool Education
University of Connecticut Health Center
A.J. Pappanikou Center for Developmental Disabilities
263 Farmington Ave-MC 6222
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If you have any questions/concerns please feel free to contact Amy Novotny at:
(860) 679-1585
anovotny@uchc.edu

Appendix B

Appendix B: *Percent and Frequency of Programs Reporting Level of Financial Support for Program Activities (n =945)*

Activity	Institutional Level Support	State Level Support	Federal Level Support	Private Level Support
Advisory groups	*Percent (Frequency)*			
Primary source	24.6 (232)	4.6 (43)	3.3 (31)	3.7 (35)
Secondary source	3.3 (31)	3.1 (29)	2.3 (22)	2.5 (24)
Minimal support	10.7 (101)	7.3 (69)	5.0 (47)	7.0 (66)
No support	14.8 (140)	38.7 (366)	43.2 (408)	40.5 (383)
Not applicable	46.1 (436)	46.1 (436)	46.1 (436)	46.1 (436)
Clinical supervision	*Percent (Frequency)*			
Primary source	50.2 (474)	3.8 (36)	1.9 (18)	3.3 (31)
Secondary source	6.1 (58)	6.1 (58)	2.8 (26)	5.3 (50)
Minimal support	8.5 (80)	7.7 (73)	5.5 (52)	6.6 (62)
No support	7.4 (70)	55.4 (524)	63.0 (595)	58.0 (548)
Not applicable	26.8 (253)	26.8 (253)	26.8 (253)	26.8 (253)
Community service activities	*Percent (Frequency)*			
Primary source	29.6 (280)	3.0 (28)	20. (19)	3.8 (36)
Secondary source	8.3 (78)	5.9 (56)	2.6 (25)	4.1 (39)
Minimal support	21.0 (198)	12.6 (119)	6.2 (59)	9.1 (86)
No support	10.1 (95)	47.7 (290)	58.4 (552)	52.3 (494)
Not applicable	30.7 (290)	30.7 (290)	30.7 (290)	30.7 (290)

Curriculum materials/resources	*Percent (Frequency)*			
Primary source	62.4 (590)	5.2 (49)	2.4 (23)	3.3 (31)
Secondary source	4.8 (45)	5.2 (49)	3.9 (37)	4.8 (45)
Minimal support	7.8 (74)	11.6 (110)	8.5 (80)	8.1 (77)
No support	7.2 (68)	61.1 (577)	68.3 (645)	66.8 (631)
Not applicable	16.9 (160)	16.9 (160)	16.9 (160)	16.9 (160)
Distance education	*Percent (Frequency)*			
Primary source	36.5 (345)	3.3 (31)	1.6 (15)	1.9 (18)
Secondary source	3.2 (30)	5.8 (55)	3.0 (28)	1.5 (14)
Minimal support	6.3 (60)	6.1 (58)	4.2 (40)	2.3 (22)
No support	6.1 (58)	37.1 (351)	43.7 (413)	46.8 (442)
Not applicable	47.5 (449)	47.5 (449)	47.5 (449)	47.5 (449)
Instruction	*Percent (Frequency)*			
Primary source	71.9 (679)	4.9 (46)	1.1 (10)	2.6 (25)
Secondary source	2.0 (19)	7.4 (70)	4.8 (45)	3.2 (30)
Minimal support	2.6 (25)	8.1 (77)	7.1 (67)	7.2 (68)
No support	5.9 (56)	63.1 (596)	70.6 (667)	70.5 (666)
Not applicable	16.5 (156)	16.5 (156)	16.5 (156)	16.5 (156)
Professional development	*Percent (Frequency)*			
Primary source	56.9 (538)	3.3 (31)	2.5 (24)	3.6 (34)
Secondary source	6.5 (61)	7.8 (74)	4.8 (45)	4.0 (38)
Minimal support	14.0 (132)	11.6 (110)	8.7 (82)	8.9 (84)
No support	6.9 (65)	62.2 (588)	69.1 (653)	68.6 (648)

Not applicable	14.9 (141)	14.9 (141)	14.9 (141)	14.9 (141)
Program evaluation	*Percent (Frequency)*			
Primary source	57.9 (547)	4.8 (45)	2.4 (23)	2.0 (19)
Secondary source	4.4 (42)	6.6 (62)	2.8 (26)	2.1 (20)
Minimal support	8.3 (78)	6.8 (64)	4.8 (45)	3.9 (37)
No support	6.2 (59)	59.6 (563)	67.7 (640)	69.6 (658)
Not applicable	22.3 (211)	22.3 (221)	22.3 (221)	22.3 (221)
Recruitment materials	*Percent (Frequency)*			
Primary source	59.5 (562)	2.6 (25)	3.3 (31)	2.9 (27)
Secondary source	4.0 (38)	4.4 (42)	2.1 (20)	2.2 (21)
Minimal support	8.4 (79)	5.7 (54)	4.3 (41)	4.7 (44)
No support	6.7 (63)	66.8 (631)	69.8 (660)	69.8 (660)
Not applicable	20.4 (193)	20.4 (193)	20.4 (193)	20.4 (193)
Student scholarships/stipends	*Percent (Frequency)*			
Primary source	37.5 (354)	9.3 (88)	15.2 (144)	8.0 (76)
Secondary source	14.9 (141)	15.6 (147)	12.7 (120)	10.2 (96)
Minimal support	16.4 (155)	14.1 (133)	10.3 (97)	13.3 (126)
No support	15.8 (149)	46.1 (436)	47.1 (445)	53.5 (506)
Not applicable	14.3 (135)	14.3 (135)	14.3 (135)	14.3 (135)

Appendix C

Appendix C: *Core Program Faculty*

Faculty Category	# of Faculty Involved in Program			# of Faculty Who Teach Children 0-5			# of Faculty Who Supervise Field Based Experiences			# of Tenure Track Positions						# of Non-Tenure Track Positions			Avg. # of Courses Taught Per Faculty During 2003-2004		
										Tenured	Not Yet Tenured	Tenured	Not Yet Tenured	Tenured	Not Yet Tenured						
	N	Mean	SD	N	Mean	SD	N	Mean	SD	N		Mean		SD		N	Mean	SD	N	Mean	SD
Full professor	589	2.483	2.87386	398	1.2751	1.65403	406	1.9414	3.95276	479	153	2.4858	0.7647	2.68751	1.81284	185	0.8568	2.13785	483	6.5714	6.32821
Associate professor	575	2.653	2.34229	412	1.3877	1.57873	422	1.7429	1.97511	455	195	2.3790	0.8923	2.16904	1.32529	200	0.545	0.90113	478	7.7615	7.58831
Assistant professor	574	3.0761	3.14644	438	1.5674	1.84202	455	2.1758	2.77335	249	401	1.3052	2.2723	1.94978	2.20256	235	1.4894	2.29848	480	8.5042	8.05928
Clinical/Lecturer	349	2.9191	3.639	258	1.4467	1.761	271	2.3044	2.708	119	136	0.5798	1.0680	1.91114	2.01096	248	2.4597	3.182	268	5.06	5.360
Visiting/full-time	165	1.0485	3.91184	112	0.4196	1.77388	116	0.6466	2.36369	77	75	0.1818	0.2933	1.48437	0.94115	108	0.9444	2.90289	113	2.5752	3.52492
Part-time	413	5.3518	9.14554	289	1.886	2.36514	302	3.0935	6.53064	114	128	0.0526	1.9102	6.53064	5.11999	231	2.8498	4.89462	312	3.9712	4.49249
Other	122	4.3934	4.51134	81	2.2284	2.88103	95	4.63	12.991	46	43	1.7174	1.3953	3.60039	2.45085	77	4.5974	13.42132	96	7.5625	9.47441
Additional faculty	446	2.9137	5.24756	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Appendix D

Appendix D: *Percent and Frequency of Programs Addressing Principles and Practices of IDEA. (n =728)*

Principles and Practices	Independent Research %(Frequency)	Class Lecture %(Frequency)	In-Class Simulation %(Frequency)	Field %(Frequency)	Other %(Frequency)
Assessment models (n=638) 87.6%	20.7 (151)	83.1 (605)	51.0 (371)	68.1 (496)	4.67 (34)
Assistive technology (n=527) 72.4%	16.8 (122)	60.0 (437)	38.3 (279)	48.6 (354)	4.67 (34)
Child development (n=703) 96.6%	31.7 (231)	94.1 (685)	44.0 (320)	76.4 (556)	6.04 (44)
Child focused interventions (n=659) 90.5%	26.6 (194)	85.2 (620)	51.5 (375)	77.5 (564)	6.04 (44)
Cultural & linguistic sensitivity (n=665) 91.3%	25.1 (183)	88.6 (645)	46.6 (339)	73.9 (538)	4.26 (31)
Due process (n=580) 79.7%	12.4 (90)	75.8 (552)	20.5 (149)	35.3 (257)	3.16 (23)
Family-centered practices (n=654) 89.8%	22.9 (167)	86.8 (632)	46.3 (337)	70.9 (516)	5.22 (38)
Family involvement (n=669) 91.9%	21.7 (158)	87.8 (639)	43.7 (318)	73.4 (534)	6.20 (36)
Free Appropriate Public Education (n=489) 67.2%	12.8 (93)	62.0 (451)	17.2 (125)	35.3 (257)	3.57 (26)
IEP (n=552) 75.8%	13.9 (101)	71.0 (517)	35.9 (261)	54.5 (396)	4.53 (33)
IFSP (n=509) 69.9%	11.1 (81)	63.0 (459)	27.5 (200)	43.7 (318)	4.26 (31)
Instructional planning (n=531) 72.9%	19.5 (142)	66.5 (484)	41.9 (305)	57.8 (421)	4.12 (30)
Learning environments (n=577) 79.3%	19.4 (141)	73.1 (532)	40.0 (291)	62.0 (451)	4.67 (34)
Least Restrictive Environment (n=545) 74.9%	12.6 (92)	70.3 (512)	24.7 (180)	51.9 (378)	2.88 (21)
Multi-faceted assessment (n=546) 75.0%	17.9 (130)	71.6 (521)	40.5 (295)	54.8 (399)	3.85 (28)
Natural environments (n=507) 69.6%	14.7 (107)	63.3 (461)	25.8 (188)	52.5 (382)	4.26 (31)
Professional and ethical practice (n=667) 91.6%	20.3 (148)	89.1 (649)	49.2 (358)	68.8 (501)	4.26 (31)
Teaming process (n=569) 78.2%	15.7 (114)	72.8 (530)	46.6 (339)	64.3 (468)	4.53 (33)

Principles and Practices	Independent Research %(Frequency)	Class Lecture %(Frequency)	In-Class Simulation %(Frequency)	Field %(Frequency)	Other %(Frequency)
Zero reject (n=371) 51.0%	9.1 (66)	44.0 (320)	12.5 (91)	24.7 (180)	3.85 (28)

Appendix E

Appendix E: *Cross-Disciplinary Collaboration Matrix*

	Collaborate with the Audiology Program		Collaborate with the Counseling Program		Collaborate with the Early Childhood Education Program	
Survey Program (N=394)	No	Yes	No	Yes	No	Yes
Audiology (n=1)	100 (n=1)	0 (n=0)	100 (n=1)	0 (n=0)	100 (n=1)	0 (n=0)
Counseling (n=21)	95.2 (n=20)	4.7 (n=1)	52.3 (n=11)	47.6 (n=10)	80.9 (n=17)	19 (n=4)
Early Childhood Education (n=45)	88.8 (n=40)	11.1 (n=5)	84.4 (n=38)	15.5 (n=7)	55.5 (n=25)	44.4 (n=20)
Early Childhood Special Education (n=20)	85 (n=17)	15 (n=3)	85 (n=17)	15 (n=3)	40 (n=8)	60 (n=12)
Early Intervention (n=7)	71.4 (n=5)	28.5 (n=2)	57.1 (n=4)	42.8 (n=3)	85.7 (n=6)	14.2 (n=1)
Education of the Hearing Impaired (n=6)	33.3 (n=2)	66.6 (n=4)	83.3 (n=5)	16.6 (n=1)	50 (n=3)	50 (n=3)
Education of the Visually Impaired (n=5)	40 (n=2)	60 (n=3)	100 (n=5)	0 (n=0)	80 (n=4)	20 (n=1)
Family Therapy (n=4)	100 (n=4)	0 (n=0)	50 (n=2)	50 (n=2)	100 (n=4)	0 (n=0)
Nursing (n=65)	87.6 (n=57)	12.3 (n=8)	76.9 (n=50)	23 (n=15)	61.5 (n=40)	38.4 (n=25)
Nutrition (n=8)	100 (n=8)	0 (n=0)	75 (n=6)	25 (n=2)	100 (n=8)	0 (n=0)
Occupational Therapy (n=26)	84.6 (n=22)	15.3 (n=4)	88.4 (n=23)	11.5 (n=3)	73 (n=19)	26.9 (n=7)
Physical Therapy (n=19)	78.9 (n=15)	21 (n=4)	89.4 (n=17)	10.5 (n=2)	89.4 (n=17)	10.5 (n=2)
Psychology (n=37)	89.1 (n=33)	10.8 (n=4)	51.3 (n=19)	48.6 (n=18)	62.1 (n=23)	37.8 (n=14)
Recreation Therapy (n=12)	83.3 (n=10)	16.6 (n=2)	100 (n=12)	0 (n=0)	83.3 (n=10)	16.6 (n=2)
Social Work (n=25)	88 (n=22)	12 (n=3)	64 (n=16)	36 (n=9)	76 (n=19)	24 (n=6)
Special Education (n=27)	81.4 (n=22)	18.5 (n=5)	81.4 (n=22)	18.5 (n=5)	51.8 (n=14)	48.1 (n=13)
Speech & Language Pathology (n=26)	42.3 (n=11)	57.6 (n=15)	80.7 (n=21)	19.2 (n=5)	53.8 (n=14)	46.1 (n=12)
Blended Program (n=23)	86.9 (n=20)	13 (n=3)	91.3 (n=21)	8.6 (n=2)	47.8 (n=11)	52.1 (n=12)
Other Program (n=17)	76.4 (n=13)	23.5 (n=4)	94.1 (n=16)	5.8 (n=1)	82.3 (n=14)	17.6 (n=3)

	Collaborate with the ECSE Program		Collaborate with the Early Intervention Program		Collaborate with the Education of the Hearing Impaired Program	
Survey Program (N=394)	No	Yes	No	Yes	No	Yes
Audiology (n=1)	100 (n=1)	0 (n=0)	100 (n=1)	0 (n=0)	100 (n=1)	0 (n=0)
Counseling (n=21)	80.9 (n=17)	19 (n=4)	90.4 (n=19)	9.5 (n=2)	95.2 (n=20)	4.7 (n=1)
Early Childhood Education (n=45)	55.5 (n=25)	44.4 (n=20)	75.5 (n=34)	24.4 (n=11)	91.1 (n=41)	8.8 (n=4)
Early Childhood Special Education (n=20)	50 (n=10)	50 (n=10)	60 (n=12)	40 (n=8)	85 (n=17)	15 (n=3)
Early Intervention (n=7)	42.8 (n=3)	57.1 (n=4)	28.5 (n=2)	71.4 (n=5)	57.1 (n=4)	42.8 (n=3)
Education of the Hearing Impaired (n=6)	66.6 (n=4)	33.3 (n=2)	100 (n=6)	0 (n=0)	83.3 (n=5)	16.6 (n=1)
Education of the Visually Impaired (n=5)	40 (n=2)	60 (n=3)	40 (n=2)	60 (n=3)	100 (n=5)	0 (n=0)
Family Therapy (n=4)	100 (n=4)	0 (n=0)	100 (n=4)	0 (n=0)	100 (n=4)	0 (n=0)
Nursing (n=65)	78.4 (n=51)	21.5 (n=14)	78.4 (n=51)	21.5 (n=14)	92.3 (n=60)	7.6 (n=5)
Nutrition (n=8)	100 (n=8)	0 (n=0)	100 (n=8)	0 (n=0)	100 (n=8)	0 (n=0)
Occupational Therapy (n=26)	61.5 (n=16)	38.4 (n=10)	73 (n=19)	26.9 (n=7)	84.6 (n=22)	15.3 (n=4)
Physical Therapy (n=19)	78.9 (n=15)	21 (n=4)	78.9 (n=15)	21 (n=4)	94.7 (n=18)	5.2 (n=1)
Psychology (n=37)	70.2 (n=26)	29.7 (n=11)	81 (n=30)	18.9 (n=7)	86.4 (n=32)	13.5 (n=5)
Recreation Therapy (n=12)	75 (n=9)	25 (n=3)	100 (n=12)	0 (n=0)	100 (n=12)	0 (n=0)
Social Work (n=25)	68 (n=17)	32 (n=8)	80 (n=20)	20 (n=5)	84 (n=21)	16 (n=4)
Special Education (n=27)	59.2 (n=16)	40.7 (n=11)	81.4 (n=22)	18.5 (n=5)	77.7 (n=21)	22.2 (n=6)
Speech & Language Pathology (n=26)	23 (n=6)	76.9 (n=20)	46.1 (n=12)	53.8 (n=14)	73 (n=19)	26.9 (n=7)
Blended Program (n=23)	86.9 (n=20)	13 (n=3)	78.2 (n=18)	21.7 (n=5)	78.2 (n=18)	21.7 (n=5)
Other Program (n=17)	64.7 (n=11)	35.2 (n=6)	64.7 (n=11)	35.2 (n=6)	82.3 (n=14)	17.6 (n=3)

	Collaborate with the Education of the Visually Impaired Program		Collaborate with the Family Therapy Program		Collaborate with the Nursing Program	
Survey Program (N=394)	No	Yes	No	Yes	No	Yes
Audiology (n=1)	100 (n=1)	0 (n=0)	100 (n=1)	0 (n=0)	100 (n=1)	0 (n=0)
Counseling (n=21)	95.2 (n=20)	4.7 (n=1)	57.1 (n=12)	42.8 (n=9)	76.1 (n=16)	23.8 (n=5)
Early Childhood Education (n=45)	97.7 (n=44)	2.2 (n=1)	86.6 (n=39)	13.3 (n=6)	88.8 (n=40)	11.1 (n=5)
Early Childhood Special Education (n=20)	95 (n=19)	5 (n=1)	95 (n=19)	5 (n=1)	95 (n=19)	5 (n=1)
Early Intervention (n=7)	71.4 (n=5)	28.5 (n=2)	57.1 (n=4)	42.8 (n=3)	57.1 (n=4)	42.8 (n=3)
Education of the Hearing Impaired (n=6)	100 (n=6)	0 (n=0)	100 (n=6)	0 (n=0)	100 (n=6)	0 (n=0)
Education of the Visually Impaired (n=5)	100 (n=5)	0 (n=0)	100 (n=5)	0 (n=0)	100 (n=5)	0 (n=0)
Family Therapy (n=4)	100 (n=4)	0 (n=0)	50 (n=2)	50 (n=2)	100 (n=4)	0 (n=0)
Nursing (n=65)	93.8 (n=61)	6.1 (n=4)	87.6 (n=57)	12.3 (n=8)	69.2 (n=45)	30.7 (n=20)
Nutrition (n=8)	100 (n=8)	0 (n=0)	87.5 (n=7)	12.5 (n=1)	25 (n=2)	75 (n=6)
Occupational Therapy (n=26)	92.3 (n=24)	7.6 (n=2)	88.4 (n=23)	11.5 (n=3)	61.5 (n=16)	38.4 (n=10)
Physical Therapy (n=19)	94.7 (n=18)	5.2 (n=1)	100 (n=19)	0 (n=0)	68.4 (n=13)	31.5 (n=6)
Psychology (n=37)	94.5 (n=35)	5.4 (n=2)	86.4 (n=32)	13.5 (n=5)	81 (n=30)	18.9 (n=7)
Recreation Therapy (n=12)	100 (n=12)	0 (n=0)	100 (n=12)	0 (n=0)	100 (n=12)	0 (n=0)
Social Work (n=25)	92 (n=23)	8 (n=2)	72 (n=18)	28 (n=7)	64 (n=16)	36 (n=9)
Special Education (n=27)	81.4 (n=22)	18.5 (n=5)	92.5 (n=25)	7.4 (n=2)	96.2 (n=26)	3.7 (n=1)
Speech & Language Pathology (n=26)	96.1 (n=25)	3.8 (n=1)	84.6 (n=22)	15.3 (n=4)	76.9 (n=20)	23 (n=6)
Blended Program (n=23)	86.9 (n=20)	13 (n=3)	91.3 (n=21)	8.6 (n=2)	82.6 (n=19)	17.3 (n=4)
Other Program (n=17)	82.3 (n=14)	17.6 (n=3)	94.1 (n=16)	5.8 (n=1)	82.3 (n=14)	17.6 (n=3)

	Collaborate with the Nutrition Program		Collaborate with the Occupational Therapy Program		Collaborate with the Physical Therapy Program	
Survey Program (N=394)	No	Yes	No	Yes	No	Yes
Audiology (n=1)	100 (n=1)	0 (n=0)	100 (n=1)	0 (n=0)	100 (n=1)	0 (n=0)
Counseling (n=21)	95.2 (n=20)	4.7 (n=1)	95.2 (n=20)	4.7 (n=1)	95.2 (n=20)	4.7 (n=1)
Early Childhood Education (n=45)	82.2 (n=37)	17.7 (n=8)	88.8 (n=40)	11.1 (n=5)	100 (n=45)	0 (n=0)
Early Childhood Special Education (n=20)	100 (n=20)	0 (n=0)	85 (n=17)	15 (n=3)	90 (n=18)	10 (n=2)
Early Intervention (n=7)	85.7 (n=6)	14.2 (n=1)	85.7 (n=6)	14.2 (n=1)	57.1 (n=4)	42.8 (n=3)
Education of the Hearing Impaired (n=6)	100 (n=6)	0 (n=0)	83.3 (n=5)	16.6 (n=1)	100 (n=6)	0 (n=0)
Education of the Visually Impaired (n=5)	100 (n=5)	0 (n=0)	100 (n=5)	0 (n=0)	100 (n=5)	0 (n=0)
Family Therapy (n=4)	100 (n=4)	0 (n=0)	100 (n=4)	0 (n=0)	100 (n=4)	0 (n=0)
Nursing (n=65)	58.4 (n=38)	41.5 (n=27)	73.8 (n=48)	26.1 (n=17)	63 (n=41)	36.9 (n=24)
Nutrition (n=8)	62.5 (n=5)	37.5 (n=3)	62.5 (n=5)	37.5 (n=3)	75 (n=6)	25 (n=2)
Occupational Therapy (n=26)	92.3 (n=24)	7.6 (n=2)	76.9 (n=20)	23 (n=6)	34.6 (n=9)	65.3 (n=17)
Physical Therapy (n=19)	84.2 (n=16)	15.7 (n=3)	31.5 (n=6)	68.4 (n=13)	94.7 (n=18)	5.2 (n=1)
Psychology (n=37)	94.5 (n=35)	5.4 (n=2)	86.4 (n=32)	13.5 (n=5)	89.1 (n=33)	10.8 (n=4)
Recreation Therapy (n=12)	100 (n=12)	0 (n=0)	91.6 (n=11)	8.3 (n=1)	91.6 (n=11)	8.3 (n=1)
Social Work (n=25)	84 (n=21)	16 (n=4)	92 (n=23)	8 (n=2)	84 (n=21)	16 (n=4)
Special Education (n=27)	96.2 (n=26)	3.7 (n=1)	85.1 (n=23)	14.8 (n=4)	85.1 (n=23)	14.8 (n=4)
Speech & Language Pathology (n=26)	80.7 (n=21)	19.2 (n=5)	69.2 (n=18)	30.7 (n=8)	80.7 (n=21)	19.2 (n=5)
Blended Program (n=23)	91.3 (n=21)	8.6 (n=2)	82.6 (n=19)	17.3 (n=4)	82.6 (n=19)	17.3 (n=4)
Other Program (n=17)	88.2 (n=15)	11.7 (n=2)	82.3 (n=14)	17.6 (n=3)	82.3 (n=14)	17.6 (n=3)

	Collaborate with the Psychology Program		Collaborate with the Recreation Therapy Program		Collaborate with the Social Work Program	
Survey Program (N=394)	No	Yes	No	Yes	No	Yes
Audiology (n=1)	0 (n=0)	100 (n=1)	100 (n=1)	0 (n=0)	100 (n=1)	0 (n=0)
Counseling (n=21)	33.3 (n=7)	66.6 (n=14)	95.2 (n=20)	4.7 (n=1)	71.4 (n=15)	28.5 (n=6)
Early Childhood Education (n=45)	57.7 (n=26)	42.2 (n=19)	93.3 (n=42)	6.6 (n=3)	82.2 (n=37)	17.7 (n=8)
Early Childhood Special Education (n=20)	70 (n=14)	30 (n=6)	100 (n=20)	0 (n=0)	85 (n=17)	15 (n=3)
Early Intervention (n=7)	14.2 (n=1)	85.7 (n=6)	71.4 (n=5)	28.5 (n=2)	85.7 (n=6)	14.2 (n=1)
Education of the Hearing Impaired (n=6)	83.3 (n=5)	16.6 (n=1)	100 (n=6)	0 (n=0)	100 (n=6)	0 (n=0)
Education of the Visually Impaired (n=5)	100 (n=5)	0 (n=0)	100 (n=5)	0 (n=0)	100 (n=5)	0 (n=0)
Family Therapy (n=4)	50 (n=2)	50 (n=2)	100 (n=4)	0 (n=0)	0 (n=0)	100 (n=4)
Nursing (n=65)	55.3 (n=36)	44.6 (n=29)	84.6 (n=55)	15.3 (n=10)	60 (n=39)	40 (n=26)
Nutrition (n=8)	75 (n=6)	25 (n=2)	100 (n=8)	0 (n=0)	87.5 (n=7)	12.5 (n=1)
Occupational Therapy (n=26)	53.8 (n=14)	46.1 (n=12)	80.7 (n=21)	19.2 (n=5)	80.7 (n=21)	19.2 (n=5)
Physical Therapy (n=19)	73.6 (n=14)	26.3 (n=5)	68.4 (n=13)	31.5 (n=6)	57.8 (n=11)	42.1 (n=8)
Psychology (n=37)	70.2 (n=26)	29.7 (n=11)	91.8 (n=34)	8.1 (n=3)	81 (n=30)	18.9 (n=7)
Recreation Therapy (n=12)	58.3 (n=7)	41.6 (n=5)	50 (n=6)	50 (n=6)	100 (n=12)	0 (n=0)
Social Work (n=25)	60 (n=15)	40 (n=10)	92 (n=23)	8 (n=2)	88 (n=22)	12 (n=3)
Special Education (n=27)	66.6 (n=18)	33.3 (n=9)	77.7 (n=21)	22.2 (n=6)	85.1 (n=23)	14.8 (n=4)
Speech & Language Pathology (n=26)	46.1 (n=12)	53.8 (n=14)	92.3 (n=24)	7.6 (n=2)	80.7 (n=21)	19.2 (n=5)
Blended Program (n=23)	69.5 (n=16)	30.4 (n=7)	86.9 (n=20)	13 (n=3)	73.9 (n=17)	26 (n=6)
Other Program (n=17)	35.2 (n=6)	64.7 (n=11)	88.2 (n=15)	11.7 (n=2)	88.2 (n=15)	11.7 (n=2)

	Collaborate with the General Special Education Program		Collaborate with the Orientation and Mobility Program		Collaborate with the Speech/Language Pathology Program	
Survey Program (N=394)	No	Yes	No	Yes	No	Yes
Audiology (n=1)	0 (n=0)	100 (n=1)	100 (n=1)	0 (n=0)	0 (n=0)	100 (n=1)
Counseling (n=21)	52.3 (n=11)	47.6 (n=10)	100 (n=21)	0 (n=0)	90.4 (n=19)	9.5 (n=2)
Early Childhood Education (n=45)	55.5 (n=25)	44.4 (n=20)	100 (n=45)	0 (n=0)	71.1 (n=32)	28.8 (n=13)
Early Childhood Special Education (n=20)	70 (n=14)	30 (n=6)	100 (n=20)	0 (n=0)	75 (n=15)	25 (n=5)
Early Intervention (n=7)	28.5 (n=2)	71.4 (n=5)	100 (n=7)	0 (n=0)	57.1 (n=4)	42.8 (n=3)
Education of the Hearing Impaired (n=6)	66.6 (n=4)	33.3 (n=2)	100 (n=6)	0 (n=0)	33.3 (n=2)	66.6 (n=4)
Education of the Visually Impaired (n=5)	80 (n=4)	20 (n=1)	80 (n=4)	20 (n=1)	60 (n=3)	40 (n=2)
Family Therapy (n=4)	75 (n=3)	25 (n=1)	100 (n=4)	0 (n=0)	100 (n=4)	0 (n=0)
Nursing (n=65)	84.6 (n=55)	15.3 (n=10)	93.8 (n=61)	6.1 (n=4)	83 (n=54)	16.9 (n=11)
Nutrition (n=8)	87.5 (n=7)	12.5 (n=1)	100 (n=8)	0 (n=0)	87.5 (n=7)	12.5 (n=1)
Occupational Therapy (n=26)	69.2 (n=18)	30.7 (n=8)	92.3 (n=24)	7.6 (n=2)	50 (n=13)	50 (n=13)
Physical Therapy (n=19)	78.9 (n=15)	21 (n=4)	94.7 (n=18)	5.2 (n=1)	57.8 (n=11)	42.1 (n=8)
Psychology (n=37)	56.7 (n=21)	43.2 (n=16)	97.2 (n=36)	2.7 (n=1)	89.1 (n=33)	10.8 (n=4)
Recreation Therapy (n=12)	58.3 (n=7)	41.6 (n=5)	100 (n=12)	0 (n=0)	83.3 (n=10)	16.6 (n=2)
Social Work (n=25)	72 (n=18)	28 (n=7)	92 (n=23)	8 (n=2)	76 (n=19)	24 (n=6)
Special Education (n=27)	44.4 (n=12)	55.5 (n=15)	96.2 (n=26)	3.7 (n=1)	62.9 (n=17)	37 (n=10)
Speech & Language Pathology (n=26)	30.7 (n=8)	69.2 (n=18)	100 (n=26)	0 (n=0)	88.4 (n=23)	11.5 (n=3)
Blended Program (n=23)	69.5 (n=16)	30.4 (n=7)	100 (n=23)	0 (n=0)	73.9 (n=17)	26 (n=6)
Other Program (n=17)	47 (n=8)	52.9 (n=9)	100 (n=17)	0 (n=0)	52.9 (n=9)	47 (n=8)

	Collaborate with a Blended Program		Collaborate with Other Program		Collaborate with the Rehabilitation Counseling Program	
Survey Program (N=394)	No	Yes	No	Yes	No	Yes
Audiology (n=1)	100 (n=1)	0 (n=0)	0 (n=0)	100 (n=1)	100 (n=1)	0 (n=0)
Counseling (n=21)	95.2 (n=20)	4.7 (n=1)	90.4 (n=19)	9.5 (n=2)	76.1 (n=16)	23.8 (n=5)
Early Childhood Education (n=45)	95.5 (n=43)	4.4 (n=2)	84.4 (n=38)	15.5 (n=7)	100 (n=45)	0 (n=0)
Early Childhood Special Education (n=20)	100 (n=20)	0 (n=0)	90 (n=18)	10 (n=2)	90 (n=18)	10 (n=2)
Early Intervention (n=7)	100 (n=7)	0 (n=0)	85.7 (n=6)	14.2 (n=1)	57.1 (n=4)	42.8 (n=3)
Education of the Hearing Impaired (n=6)	100 (n=6)	0 (n=0)	66.6 (n=4)	33.3 (n=2)	66.6 (n=4)	33.3 (n=2)
Education of the Visually Impaired (n=5)	100 (n=5)	0 (n=0)	80 (n=4)	20 (n=1)	100 (n=5)	0 (n=0)
Family Therapy (n=4)	75 (n=3)	25 (n=1)	100 (n=4)	0 (n=0)	75 (n=3)	25 (n=1)
Nursing (n=65)	98.4 (n=64)	1.5 (n=1)	84.6 (n=55)	15.3 (n=10)	84.6 (n=55)	15.3 (n=10)
Nutrition (n=8)	100 (n=8)	0 (n=0)	75 (n=6)	25 (n=2)	100 (n=8)	0 (n=0)
Occupational Therapy (n=26)	100 (n=26)	0 (n=0)	92.3 (n=24)	7.6 (n=2)	88.4 (n=23)	11.5 (n=3)
Physical Therapy (n=19)	100 (n=19)	0 (n=0)	73.6 (n=14)	26.3 (n=5)	89.4 (n=17)	10.5 (n=2)
Psychology (n=37)	97.2 (n=36)	2.7 (n=1)	91.8 (n=34)	8.1 (n=3)	94.5 (n=35)	5.4 (n=2)
Recreation Therapy (n=12)	100 (n=12)	0 (n=0)	75 (n=9)	25 (n=3)	100 (n=12)	0 (n=0)
Social Work (n=25)	100 (n=25)	0 (n=0)	76 (n=19)	24 (n=6)	92 (n=23)	8 (n=2)
Special Education (n=27)	85.1 (n=23)	14.8 (n=4)	74 (n=20)	25.9 (n=7)	88.8 (n=24)	11.1 (n=3)
Speech & Language Pathology (n=26)	96.1 (n=25)	3.8 (n=1)	100 (n=26)	0 (n=0)	84.6 (n=22)	15.3 (n=4)
Blended Program (n=23)	60.8 (n=14)	39.1 (n=9)	91.3 (n=21)	8.6 (n=2)	95.6 (n=22)	4.3 (n=1)
Other Program (n=17)	94.1 (n=16)	5.8 (n=1)	70.5 (n=12)	29.4 (n=5)	100 (n=17)	0 (n=0)

	Collaborate with the Pediatrics Program	
SurveyProgram (N=394)	No	Yes
Audiology (n=1)	100 (n=1)	0 (n=0)
Counseling (n=21)	95.2 (n=20)	4.7 (n=1)
Early Childhood Education (n=45)	97.7 (n=44)	2.2 (n=1)
Early Childhood Special Education (n=20)	90 (n=18)	10 (n=2)
Early Intervention (n=7)	71.4 (n=5)	28.5 (n=2)
Education of the Hearing Impaired (n=6)	100 (n=6)	0 (n=0)
Education of the Visually Impaired (n=5)	100 (n=5)	0 (n=0)
Family Therapy (n=4)	100 (n=4)	0 (n=0)
Nursing (n=65)	41.5 (n=27)	58.4 (n=38)
Nutrition (n=8)	87.5 (n=7)	12.5 (n=1)
Occupational Therapy (n=26)	76.9 (n=20)	23 (n=6)
Physical Therapy (n=19)	73.6 (n=14)	26.3 (n=5)
Psychology (n=37)	81 (n=30)	18.9 (n=7)
Recreation Therapy (n=12)	100 (n=12)	0 (n=0)
Social Work (n=25)	80 (n=20)	20 (n=5)
Special Education (n=27)	92.5 (n=25)	7.4 (n=2)
Speech & Language Pathology (n=26)	76.9 (n=20)	23 (n=6)
Blended Program (n=23)	86.9 (n=20)	13 (n=3)
Other Program (n=17)	94.1 (n=16)	5.8 (n=1)