



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



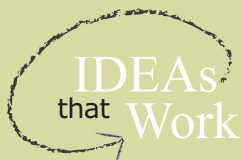
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Data Report

**Study VIII Data Report: Alignment of ECSE Higher
Education Curricula with National Personnel Standards**

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 purpose of this Center is 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 ECSE and EI services. Information gathered will be utilized to identify critical gaps in current knowledge and design and conduct a program of research at the national, state, institutional and direct provider level to address these gaps. This program of research and policy formulation will yield information vital to developing policies and practices at all levels of government, including institutions of higher education.

Purpose of the Report

The limited research on Early Childhood Special Education (ECSE) personnel preparation programs tends to focus on program characteristics such as required courses and field experiences, institutional characteristics, and other attributes rather than the standards base for the curriculum. Yet, the Council for Exceptional Children (CEC), the CEC Division for Early Childhood (DEC), and the National Association of the Education of Young Children (NAEYC) advocate that Institutions' of Higher Education (IHE) curricula in ECSE be based on nationally validated standards (CEC, 2003; Hyson, 2003). Further, research links program quality and outcomes for children with qualifications of EC educators (e.g., Early et al., 2007) and suggests that IHE programs adhere to evidence-based practices and align with nationally validated standards. The DEC, CEC, and NAEYC personnel standards are evidence-based, nationally validated and specifically address knowledge and skills needed to provide services for young children and families. Professionals prepared in such a standards based curriculum should have the knowledge and skills to provide ECSE services based on evidence-based practices. In addition, these program graduates would be considered to be highly qualified through No Child Left Behind (NCLB) requirements in many states.

The Center (i.e., the Center to Inform Policy and Practice in Personnel Preparation for Early Intervention and Preschool Education) conducted a study to determine the alignment of ECSE IHE curricula with DEC, CEC, and NAEYC (as appropriate) personnel standards. A previous Center study (The Center to Inform Policy and Practice in Personnel Preparation for Early Intervention and Preschool Education, 2008) identified the following certification models in ECSE: (1) ECSE, (2) Special Education, (3) Blended Early Childhood Education (ECE/ECSE), (4) ECSE endorsement on ECE or special education certification, (5) ECE endorsement on special education certification and completed an item-by-item content analysis comparing state certification standards. Three states were randomly selected per model.

As a follow-up to that analysis, universities/colleges in those states with degree programs approved to result in the respective state certification/endorsement were identified. The specific research questions for this study are as follows:

1. To what extent are IHE curricula in ECSE based on national personnel standards?
2. How does the inclusion of national personnel standards in state ECSE certification requirements and IHE curricula in ECSE within the respective state compare?
3. How does the inclusion of national personnel standards in IHE curricula in ECSE compare across levels of degree programs?
4. How does the inclusion of national personnel standards in IHE curricula in ECSE compare across programs that focus on preparation for different age ranges?

Definitions

For the purposes of this study, the following definitions were employed:

- Certification – the set of regulated requirements that lead to initial preparation in ECSE.
- Endorsement - the set of regulated ECSE requirements that are in addition to the requirements for a specific certificate, such as ECE, K-12 special education.
- Blended ECE and ECSE certification - the set of regulated requirements that lead to initial preparation in both ECE and ECSE through a single certificate.

METHODOLOGY

Sample and Procedures

A previous Center study (Center to Inform Personnel Preparation Policy and Practice in Early Intervention and Preschool Education, 2008) identified five primary certification models in ECSE: (1) ECSE, (2) Special Education, (3) Blended ECE/ECSE, (4) ECSE endorsement on special education certification, (5) ECSE endorsement on ECE certification. Three states per model were randomly selected from the 38 states that participated in that study and a content analysis of the standards required for each state's ECSE certification model comparing them to national standards (i.e., CEC, DEC, and NAEYC) was conducted.

The sample for this study was identified from those same states. State agency representatives (e.g., Part B 619 coordinator, certification staff) were asked to provide the names and contact information for IHEs whose degree programs were approved to lead to the state's ECSE certification or to provide the website where that information could be obtained. The number of IHE programs identified for each of the five programs was as follows: (1) ECSE (n=11), (2) Special Education (n=13), (3) Blended ECE/ECSE (n=14), (4) ECSE endorsement on special education certification (n=11), and (5) ECSE endorsement on ECE certification (n=17).

Research assistants then conducted web searches to locate IHE curricula program descriptions, syllabi, and handbooks. If these materials could not be obtained via the web search, a program administrator or faculty member was contacted via e-mail up to two times to assist with obtaining program syllabi and any other relevant documents (e.g., handbooks). If no information was received, the respective administrator or faculty member was telephoned with an information request.

Some degree of information was found for each program. This data report will discuss analysis for 15 IHE programs representing the five ECSE certification models. These programs are those for which complete information was obtained. Table 1 identifies the state certification model and age range for the certification; the Carnegie classification (system of classification for colleges and universities based on what is taught, who are the students, and what is the setting); total student enrollment; geographic location for each IHE; the College or Department in which the program is housed; the number of syllabi reviewed; and whether the program was undergraduate or graduate.

Table 1. *Characteristics of IHEs*

| University | Certification Model | Age Range | Carnegie Classification | Student Enrollment | Geographic Location | Department, College | Number of Syllabi | BS or MA |
|------------|---------------------|-----------------------------|---|--------------------|---------------------|---|-------------------|------------------|
| 1 | ECSE | B-5 years | RU/H Research University | 20,376 | NW | College of Education | 15 | MA |
| 2 | ECSE | 3-5 years | RU/H Research University | 12,800 | NE | Integrated Professional Studies | 10 | MA |
| 3 | ECSE | 3-5 years | RU/H Research University | 28,840 | Mid-Atlantic | Special Education | 10 | MA |
| 4 | ECSE on SPE | Birth–3 rd gr. | RU/H Research Universities | 34,933 | NE | Special Edu. | 21 | MA |
| 5 | ECSE on SPE K-12 | B-5 years (endorsement) | RU/H Research University | 30,714 | Mid-Atlantic | Special Edu. | 18 | BS leading to MA |
| 6 | ECSE on SPE K-12 | B-5 years (endorsement) | RU/H Research Universities | 12,099 | NW | Elementary and ECE | 8 | BS leading to MA |
| 7 | Blended | 3 years–3 rd gr. | RU/VH Research Universities | 46,174 | SE | Childhood Education | 20 | BS |
| 8 | Blended | Birth–5 years | Baccalaureate/Diverse | 1,683 | Midwest | Curriculum & Instruction | 24 | BS |
| 9 | Blended | Birth–5 years | Master’s M Master’s Colleges and Universities | 5,516 | NE | Education | 9 | MA |
| 10 | ECSE on ECE | Birth–5 years | Master’s L Master’s Colleges and Universities | 5,348 | Midwest | College of Education | 13 | BS |
| 11 | ECSE on ECE | Birth–5 years | Master’s L Master’s Colleges and Universities | 10,400 | SE | Special Education & Communication Disorders | 14 | BS & MA |
| 12 | ECSE on ECE | Birth–5 years | RU/VH Research Universities | 33,405 | SE | Communication Sciences & Special Education | 10 | BS & MA |

| University | Certification Model | Age Range | Carnegie Classification | Student Enrollment | Geographic Location | Department, College | Number of Syllabi | BS or MA |
|------------|---------------------|------------|-----------------------------------|--------------------|---------------------|--------------------------|-------------------|----------|
| 13 | Special Education | K-12 | DRU Doctoral/ Research University | 4,077 | SW | School of Education | 18 | MA |
| 14 | Special Education | K-12 | RU/H Research University | 13,558 | NW | Curriculum & Instruction | 6 | MA |
| 15 | Special Education | 5-21 years | RU/H Research Universities | 14,071 | NE | Education | 10 | MA |

Content Analysis

To determine the extent to which IHE's ECSE curricula align with national standards, Center faculty completed a content analysis of all syllabi and other relevant program documents (e.g., program handbooks). All components of the documents were reviewed (e.g., course objectives, course outline, assignments, topics and related readings). The national standards used in the comparison were: the CEC/DEC early childhood special education knowledge and skills, the CEC Common Core knowledge and skills (CEC, 2003), and the NAEYC early childhood personnel standards, if relevant (Hyson, 2003). NAEYC standards were used for the states with ECE and ECSE blended certification, states that added ECSE endorsement on ECE certification, and those states that added ECE endorsement onto ECSE. One senior investigator completed the content analysis.

Data Analysis

A content analysis of the standards or competencies addressed by the IHE curricula was completed by comparing program documents with the personnel standards of CEC, CEC/DEC and NAEYC. Percentages of standards represented in the IHE documents that matched the national standards were computed by certification model and compared to the standards represented by the respective state's certification model, the degree of inclusion in undergraduate and graduate programs, and across programs that focus on preparation for different age ranges

RESULTS

IHE Curricula Alignment with National Personnel Standards

Program documents for the 15 universities/colleges reported in this report were analyzed in comparison to the personnel standards of CEC, CEC/DEC, and NAEYC (for programs in states with blended ECE/ECSE certification and ECSE endorsement on ECE certification). Table 2 reports the total number and percentage of CEC common core and CEC/DEC ECSE standards for all 15 IHEs and the total number and percentage of CEC common core, CEC/DEC ECSE, and NAEYC standards for the six IHEs that are based on either a blended model or ECSE endorsement added to ECE certification. In addition, the total number of standards and the percentage is provided separately for common core, ECSE, and NAEYC standards. The range of common core and ECSE standards for the 15 IHEs is 34% to 94%, while the range of common core, ECSE, and NAEYC standards for the six IHEs for which NAEYC standards were also included is 59% to 94%. The range for the three sets of standards separately is: (1) common core 33% to 93%, (2) ECSE 21% to 98%, and (3) NAEYC 84% to 100%. When examining the data in Table 2 by certification model, it seems that the IHE programs that are based on ECSE endorsement added to special education certification most consistently incorporate the common core and ECSE standards, with IHE programs based on ECSE certification next in the consistency for including standards. IHE programs in states that require special education certification to work with preschoolers with disabilities are least likely to base their programs on the common core and ECSE standards. However, the IHE incorporating the highest percentage of standards (i.e., CC and ECSE 94%, CC, ECSE, and NAEYC 94%, CC 93%, ECSE 98%, and NAEYC 95%) is in a state that has ECSE endorsement added to ECE certification.

Comparison of National Standards in IHE Curricula and State Certification Requirements

Table 3 depicts the percentage of common core and ECSE standards met by state's certification policies and the percentage of common core and ECSE standards addressed by the IHE in each respective state. The results indicate that a greater percentage of the standards are addressed in nine of the IHE curricula than in their respective state policies, while a greater percentage of standards are addressed in five of the state's policies than in the IHE curricula. In one state, the same percentage of standards is addressed by both the state policy and the IHE curricula. Each of the three IHE programs that are in states with ECSE endorsement added onto special education certification and with blended certification incorporate more of the national standards than do their states' certification requirements. While each of the three IHE curricula in states that have ECSE endorsement added onto ECE certification address fewer standards than does their state certification policy.

Table 2. Total Number and Percentage of Standards Addressed by IHE Programs

| IHE | Model | Total CC & ECSE (n=167) | | Total CC, ECSE, & NAEYC (n=186) | | Total CC (n=125) | | Total ECSE (n=42) | | Total NAEYC (n=19) | |
|-----|-------------------|-------------------------|----|---------------------------------|----|------------------|----|-------------------|----|--------------------|-----|
| | | | % | | % | | % | | % | | % |
| 1 | ECSE | 133 | 80 | NA | | 97 | 78 | 36 | 86 | NA | |
| 2 | ECSE | 94 | 56 | NA | | 70 | 56 | 24 | 57 | NA | |
| 3 | ECSE | 119 | 71 | NA | | 85 | 68 | 34 | 81 | NA | |
| 4 | ECSE on SPE | 131 | 78 | NA | | 92 | 74 | 39 | 93 | NA | |
| 5 | ECSE on SPE K-12 | 115 | 69 | NA | | 87 | 70 | 28 | 67 | NA | |
| 6 | ECSE on SPE K-12 | 128 | 77 | NA | | 91 | 73 | 37 | 88 | NA | |
| 7 | Blended | 111 | 66 | 130 | 70 | 82 | 66 | 29 | 69 | 19 | 100 |
| 8 | Blended | 93 | 56 | 109 | 59 | 73 | 58 | 20 | 48 | 16 | 84 |
| 9 | Blended | 123 | 74 | 141 | 76 | 86 | 69 | 37 | 88 | 18 | 95 |
| 10 | ECSE on ECE | 157 | 94 | 175 | 94 | 116 | 93 | 41 | 98 | 18 | 95 |
| 11 | ECSE on ECE | 117 | 70 | 135 | 73 | 86 | 69 | 31 | 74 | 18 | 95 |
| 12 | ECSE on ECE | 100 | 60 | 119 | 64 | 68 | 54 | 32 | 76 | 19 | 100 |
| 13 | Special Education | 95 | 57 | NA | | 77 | 62 | 18 | 43 | NA | |
| 14 | Special Education | 71 | 43 | NA | | 62 | 50 | 9 | 21 | NA | |
| 15 | Special Education | 57 | 34 | NA | | 41 | 33 | 16 | 38 | NA | |

CC = CEC Common Core, ECSE = CEC/DEC ECSE standards, NAEYC = NAEYC standards

Table 3. Comparison of National Standards in IHE Curricula and State Certification Policies

| IHE | Model | Percentage of CC and ECSE Standards Included in IHE Curricula | Percentage of CC and ECSE Standards Included in State Certification Policy |
|-----|-------------------|---|--|
| 1 | ECSE | 80 | 38 |
| 2 | ECSE | 56 | 56 |
| 3 | ECSE | 71 | 100 |
| 4 | ECSE on SPE | 78 | 0 |
| 5 | ECSE on SPE K-12 | 69 | 41 |
| 6 | ECSE on SPE K-12 | 77 | 10 |
| 7 | Blended | 66 | 14 |
| 8 | Blended | 56 | 21 |
| 9 | Blended | 74 | 13 |
| 10 | ECSE on ECE | 94 | 100 |
| 11 | ECSE on ECE | 70 | 98 |
| 12 | ECSE on ECE | 60 | 98 |
| 13 | Special Education | 57 | 19 |
| 14 | Special Education | 43 | 0 |
| 15 | Special Education | 34 | 39 |

CC = CEC Common Core, ECSE = CEC/DEC ECSE standards

As demonstrated by Table 4, each of the three sets of national standards is incorporated at a higher percentage in IHE curricula than in state policy. Percentages for common core standards are higher in IHE curricula for 10 of the 15 states. In two of the states for which the state policy includes a higher percentage of standards, the percentages are very similar (i.e., 100% state and 93% IHE, 38% state and 33% IHE). Percentages for ECSE standards are higher in IHE curricula for eight of the 15 states. In two of the states for which the state policy includes a higher percentage of standards, the percentages are very similar (i.e., 100% state and 98% IHE, 42% state and 38% IHE). Percentages for NAEYC standards are higher in IHE curricula for four of the six states that address NAEYC standards in their certification policy. In the two states for which the state policy includes a higher percentage of standards, the percentages are very similar (i.e., 88% state and 84% IHE, 98% state and 95% IHE). Thus, overall the three sets of national standards are better represented in IHE curricula than in state policies.

Table 4. *Comparison of the Percentage of CEC Common Core, ECSE, and NAEYC Standards Across IHE Curricula and State Policies*

| IHE | Model | CC in IHE Curricula | CC in State Policy | ECSE in IHE Curricula | ECSE in State Policy | NAEYC in IHE Curricula | NAEYC in State Policy |
|-----|-------------------|---------------------|--------------------|-----------------------|----------------------|------------------------|-----------------------|
| 1 | ECSE | 78 | 32 | 86 | 50 | NA | |
| 2 | ECSE | 56 | 52 | 57 | 68 | NA | |
| 3 | ECSE | 68 | 100 | 81 | 100 | NA | |
| 4 | ECSE on SPE | 74 | 0 | 93 | 0 | NA | |
| 5 | ECSE on SPE K-12 | 70 | 41 | 67 | 48 | NA | |
| 6 | ECSE on SPE K-12 | 73 | 12 | 88 | 7 | NA | |
| 7 | Blended | 66 | 12 | 69 | 27 | 100 | 50 |
| 8 | Blended | 58 | 10 | 48 | 59 | 84 | 88 |
| 9 | Blended | 69 | 10 | 88 | 27 | 95 | 60 |
| 10 | ECSE on ECE | 93 | 100 | 98 | 100 | 95 | 92 |
| 11 | ECSE on ECE | 69 | 98 | 74 | 98 | 95 | 98 |
| 12 | ECSE on ECE | 54 | 98 | 76 | 98 | 100 | 98 |
| 13 | Special Education | 62 | 24 | 43 | 7 | NA | |
| 14 | Special Education | 50 | 0 | 21 | 0 | NA | |
| 15 | Special Education | 33 | 38 | 38 | 42 | NA | |

CC = CEC Common Core, ECSE = CEC/DEC ECSE standards, NAEYC = NAEYC standards

Comparison of National Standards in IHE Curricula across Levels of Degree Programs

An ongoing debate in the field of ECSE is whether individuals should be prepared to work with young children with developmental delays and disabilities at the undergraduate or graduate level. Table 5 reports the percentage of national standards included in the IHE programs by type of degree. Caution should be used in interpreting these data because of the small sample size and unequal number of programs per degree type. Eight of the IHE curricula in the sample were at the master's level, three were at the undergraduate level, and in four of the programs, the curriculum began at the undergraduate level culminating in a master's degree. The range of CC and ECSE standards at the undergraduate level is 56% to 94%, with 94% being the highest percentage of

standards for all three types of degree programs. The range for undergraduate programs that are also based on NAEYC standards is 59% to 94%. The range of CC and ECSE standards for BS programs leading to a master's degree program is 60% to 77%. The range for CC and ECSE standards for MA programs is 34% to 80%

Table 5. *Comparison of Inclusion of National Standards across Levels of Degree Programs*

| Degree Level | Percentage CC & ECSE Standards | Percentage CC, ECSE, & NAEYC Standards | Percentage CC Standards | Percentage ECSE Standards | Percentage NAEYC Standards |
|------------------|--------------------------------------|---|-------------------------------|---------------------------------|----------------------------------|
| BS | 66 | 70 | 66 | 69 | 100 |
| BS | 56 | 59 | 58 | 48 | 84 |
| BS | 94 | 94 | 93 | 98 | 95 |
| BS leading to MA | 69 | NA | 70 | 67 | NA |
| BS leading to MA | 77 | NA | 73 | 88 | NA |
| BS leading to MA | 70 | 73 | 69 | 74 | 95 |
| BS leading to MA | 60 | 64 | 54 | 76 | 100 |
| MA | 80 | NA | 78 | 86 | NA |
| MA | 56 | NA | 56 | 57 | NA |
| MA | 71 | NA | 68 | 81 | NA |
| MA | 78 | NA | 74 | 93 | NA |
| MA | 74 | 76 | 69 | 88 | 95 |
| MA | 57 | NA | 62 | 43 | NA |
| MA | 43 | NA | 50 | 21 | NA |
| MA | 34 | NA | 33 | 38 | NA |

CC = CEC Common Core, ECSE = CEC/DEC ECSE standards, NAEYC = NAEYC standards

Comparison of National Standards in IHE Curricula across Age Range of Preparation

Table 6 reports the percentage of national standards included in the IHE programs across different age ranges of preparation. Caution should be used in interpreting these data because of the small sample size and unequal number of programs per age range. Eight of the IHE programs prepare students to work with children birth to five years, while 12 of the programs include the preschool years in their age span. Overall, programs that prepare students to work with children beginning at birth (birth to five years or birth to eight years) address the highest percentage of common core and ECSE standards.

Table 6. Comparison of National Standards in IHE Curricula Across Age Range of Preparation

| Age Range | Percentage CC & ECSE Standards | Percentage CC, ECSE, & NAEYC Standards | Percentage CC Standards | Percentage ECSE Standards | Percentage NAEYC Standards |
|-----------|--------------------------------------|---|-------------------------------|---------------------------------|----------------------------------|
| B-5 years | 80 | NA | 78 | 86 | NA |
| B-5 years | 69 | NA | 70 | 67 | NA |
| B-5 years | 77 | NA | 73 | 88 | NA |
| B-5 years | 74 | 76 | 69 | 88 | 95 |
| B-5 years | 74 | 76 | 69 | 88 | 95 |
| B-5 years | 94 | 94 | 93 | 98 | 95 |
| B-5 years | 70 | 73 | 69 | 74 | 95 |
| B-5 years | 60 | 64 | 54 | 76 | 100 |
| B-8 years | 78 | NA | 74 | 93 | NA |
| 3-5 years | 56 | NA | 56 | 57 | NA |
| 3-5 years | 71 | NA | 68 | 81 | NA |
| 3-8 years | 66 | 70 | 66 | 69 | 100 |
| K-12 | 57 | NA | 62 | 43 | NA |
| K-12 | 43 | NA | 50 | 21 | NA |
| K-12 | 34 | NA | 33 | 38 | NA |

CC = CEC Common Core, ECSE = CEC/DEC ECSE standards, NAEYC = NAEYC standards

LIMITATIONS OF THE STUDY

The interpretation of this study's findings may be impacted by several limitations. First, only three IHE curricula per certification model were included in this analysis, resulting in a small sample size. Second, the sample for analysis was determined by the accessibility of program documents via the web or through personal contact. Several IHEs with degree programs in the 15 states represented by the sample did not have program documents on their websites nor were documents provided as a result of the personal contacts. Third, results are based solely on content analysis of print documents. Syllabi for some programs and/or courses were more detailed than others. In addition, some programs had additional program materials for review (e.g., handbooks), while others did not. And finally, although student enrollment ranges from 1,683 to 46,174 and the IHEs are geographically representative of the United States, 11 of the 15 IHEs are research universities based on Carnegie Classification.

CONCLUSION

This data report discusses the results of a study designed to determine the alignment of ECSE IHE curricula with DEC, CEC, and NAEYC (as appropriate) personnel standards. A previous Center study (The Center to Inform Policy and Practice in Personnel Preparation for Early Intervention and Preschool Education, 2008) identified the following certification models in ECSE: (1) ECSE, (2) Special Education, (3) Blended Early Childhood Education (ECE/ECSE), (4) ECSE endorsement on ECE or special education certification, (5) ECE endorsement on special education certification and completed an item-by-item content analysis comparing state certification standards. As a follow-up to that analysis, universities/colleges in those states with degree programs approved to result in the respective state certification/endorsement were identified and program documents were analyzed to examine the extent to which IHE curricula are aligned with national personnel standards. Results indicated that the degree of alignment of IHE curricula with national personnel standards is wide ranging with programs that are based on ECSE endorsement added to special education certification most consistently aligned with the common core and ECSE standards. Next, the inclusion of national personnel standards in both state ECSE certification requirements and IHE curricula was examined. Results showed that in the majority of the participating states, IHE curricula addressed a greater percentage of the standards than their respective state's policies. Third, the inclusion of national standards in IHE curricula across degree levels was examined. Results indicated that there was a wide range of inclusion of standards across the undergraduate level (56%-94%), BS programs that lead to a master's degree program (60%-77%), and master's programs (34%-80%). Finally, a comparison of the inclusion of national standards in IHE curricula across the age range of preparation was examined. Results indicated that programs that prepare students to work with children beginning at birth address the highest percentage of common core and ECSE standards.

Even though the results represent a small sample of IHE curricula, it is clear that there is a large amount of variance in the inclusion of personnel standards. This finding is important due to the evidence suggesting that the qualifications of EC educators are linked to program quality and outcomes for children (e.g., Early et al., 2007) and the push for highly qualified teachers from legislation such as NCLB. Future research should expand on the findings of this study. This study should be conducted with a larger sample to better understand the state of the field. It will also be important to conduct research to understand how IHE curricula across institutions and states can be more aligned with personnel standards and how that alignment affects the quality of personnel in the field.

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