# PREPARING EARLY CHILDHOOD TEACHERS TO SUCCESSFULLY EDUCATE *ALL* CHILDREN: THE CONTRIBUTION OF FOUR-YEAR UNDERGRADUATE TEACHER PREPARATION PROGRAMS

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## Executive Summary

A growing consensus acknowledges that early childhood teacher preparation and professional development must help all teachers gain knowledge and practice skills that contribute to the educational achievement of *all* children (Ladson-Billings, 1999; NAEYC, 2002; Ray, 2000). But, the failure to adequately prepare teachers who can effectively educate children with special needs, children of color, and children who are low-income, immigrants, second language learners, second dialect speakers, and children from many cultures and ethnicities has been identified as evidence of pedagogical, instructional and conceptual problems in teacher preparation (Dieter, Voltz, & Epanchin, 2000; Irvine, 1990; Ladson-Billings, 1999; Ray, 2000; Voltz, 1998). Concern about the education of these children has often been discussed as an issue of 'diversity'—a construct that has contributed to inappropriate analysis and discussion of how best to prepare teachers to meet the needs of complex groups of young children. Research on teacher preparation in early childhood classrooms has focused on improving classroom instructional practices, increasing early childhood teachers' reflective practice, reshaping content of professional development, and increasing the number of minority and bilingual teachers. Significantly less attention has been given to how the developmental and educational needs of children, such as African American children, children for whom English is a new language or second dialect, and others have been addressed by the organizational infrastructure that shapes, defines and mandates early childhood teacher standards, accreditation and credentialing (Miller, Strosnider & Dooley, 2002). This infrastructure includes an amalgam of entities, such as—state boards of higher education, professional accreditation organizations, and institutions of higher education. The relative emphasis they give to the developmental and educational needs of children, including those with special needs, children in poverty and others may signal to teachers how significant the education of children with these characteristics should be to teachers' professional preparation. Despite the central role entities such as these play in creating, shaping and executing policies relevant to early childhood teacher preparation there is a dearth of research that examines the contribution they make to assuring that early childhood teachers can competently educate all children. In an attempt to fill this void the present study examines the role of one of these entities—four-year institutions of higher education that prepare early childhood teachers (Pre-K – early elementary grades)[1]. Specifically, we examine how the developmental and educational needs of children with special needs, children of color, children who are low-income, immigrants, second language learners and second dialect speakers are reflected in bachelor's-degree early childhood teacher preparation program requirements.

### METHODS

*Sample.* A pool of 662 colleges and universities that prepare bachelor's degree level teachers was created through the use of 8 national resources and datasets (e.g., Integrated

[1] For a discussion of the role of early childhood teacher standards developed by state boards of higher education and accreditation organizations see, Ray, Bowman & Robbins (2006). *Preparing Early Childhood Teachers to Successfully Educate All Children: The Contributions of State Boards of Education and Accreditation Organizations*, A Report to the Foundation for Child Development, New York, NY. Project on Race, Class and Culture in Early Childhood, Erikson Institute, Chicago, Illinois. On-line resource: www.erikson.edu

Postsecondary Education Data System [IPEDS]; *National Directory of Early Childhood Teacher Preparation Institutions-2003*) (see Appendix B). Included in the 662 early childhood teacher preparation programs (ECTPP) are 37 colleges and universities that historically have served underrepresented populations (CUUP) (e.g., historically Black and Latina/o institutions). CUUP institutions were identified through resources such as the United Negro College Fund, Hispanic Association of Colleges and Universities, and the *Tribal Council Journal*. The 662 ECTPP were evaluated to determine if they met study criteria: 1) the program offers a bachelor's degree in early childhood education or enables degree graduates to receive initial, provisional or permanent certification to teach in early childhood classrooms (Pre-K—early elementary grades); 2) the program prepares teachers to teach in pre-kindergarten (e.g., age 3) to early elementary grades (e.g., 3rd, 4th); and 3) the program is accredited by NCATE or a regional accreditation body. Where possible, we sought a total of 6 public and private ECTPP in each state and D. C. —the 2 largest (entire student population $\geq$ 9001), 2 small (entire student population $\leq$ 9000), and 2 additional programs of either size. Twenty-four states and D. C. had fewer than 6 eligible ECTPP, and in these states all programs were included. Twenty-one states had 7 or more ECTPP, and programs were randomly selected that met all study criteria. 226 bachelor's degree institutions of higher education met all criteria and form the basis of analysis (see Appendix C). Five states were excluded from the analysis of ECTPP because they did not meet one or more of the criteria for inclusion in the study.

The final sample of 226 represents one-third of accredited U. S. bachelor's degree programs training early childhood teachers. The sample of ECTTP includes 26 programs historically serving: African American students (10% of sample), Hispanic students (.44%), Native American students (.44%), and Deaf students (.44%). The entire sample of 226 schools have the following characteristics: 44% have student populations $\leq$ 9000 and 56% have student populations $\geq$ 9001; and 80% offer degree concentrations in early childhood only, and 20% in various other combinations of degree programs (e.g. early childhood and bilingual early childhood, and early childhood special education).

*Coding and Data Analysis.* An initial scan of websites of 226 institutions of higher education revealed that characteristics (e.g., culture, ethnicity, special needs) associated with so-called 'diverse children' were referenced in teacher education requirements (e.g., course descriptions, program descriptions). Eleven *diversity categories* were identified through this process including *race, ethnicity, culture, language, immigrant status*, *social class, special needs, all children, diversity, minorities*, and *learner characteristics.* Specific and related references to these categories (e.g., race, racism, racial minority) found in examined texts of ECTPP requirements were coded, and throughout the study we refer to clusters of diversity categories as 'diversity content'. The websites of the 226 institutions were also searched for 6 characteristics: 1) semester hours of required *explicit* professional education courses that indicate through the presence of diversity categories in the course title and description that the course addresses the developmental and educational needs of children with special needs, children of color, children who are low-income, immigrants, second language learners, second dialect speakers, and children from many cultures and ethnicities; 2) semester hours of required *embedded* professional education courses that indicate through the presence of diversity categories in the description (but not the course title) that the course addresses the

developmental and educational needs of children with special needs, children of color, children who are low-income, immigrants, second language learners, second dialect speakers, and children from many cultures and ethnicities; 3) required student teaching internship in a setting described by the program as providing an opportunity to work with so-called 'diverse' or 'multicultural' children; 4) general education requirement of a foreign language; 5) semester hours of required courses that only or primarily address special education; and 6) the program's statement of its mission in relation to teacher preparation (referred to in this study as a 'program review'). In addition, the influence of NCATE-accreditation on diversity requirements was evaluated by comparing NCATE accredited and non-accredited schools on the diversity requirements described above; and CUUP and majority institutions were compared. Faculty and staff in bachelor degree teacher education programs were interviewed for clarification of questions and issues that emerged as coding and analyzing data commenced.

Seven research questions are addressed:
Q1. In bachelor's degree ECTPP how many semester hours of required course work indicate that courses address the developmental and educational needs of children who have special needs, children of color, children who are low-income, immigrants, second language learners, second dialect speakers and children from many cultures and ethnicities?

Q2. Which of 11 diversity categories (e.g., race, language) appear in early childhood professional education course descriptions and to what extent do particular diversity categories (e.g., special needs) appear relative to other categories?

Q3. Which of 11 diversity categories appear in the program descriptions?

Q4. How many bachelor's degree teacher preparation programs require student internships in settings defined by the program as 'diverse', 'multicultural' or including children of color, second language/dialect learners, children from many cultures and ethnicities, and immigrant, poor and special needs children?

Q5. How many bachelor's degree teacher preparation programs have a foreign language general education requirement?

Q6. Do bachelor's-degree teacher preparation programs with and without National Council for Accreditation of Teacher Education (NCATE) accreditation differ in the number of semester hours of diversity content course work; diversity content program reviews and course descriptions; the requirement of student internship in a 'diverse' setting; and a foreign language general education requirement?

Q7. Do bachelor's degree teacher preparation programs that have educated historically underserved populations (e.g., African Americans, Latinos/-as, Native Americans, and the Deaf), differ substantially from 'majority' institutions in the number of semester hours of diversity content course work; diversity content in program reviews and course descriptions; the requirement of student internship in a 'diverse' setting; and a foreign language general education requirement?

## SUMMARY OF FINDINGS

- On average, bachelor's-degree ECTPP programs require:
    - 8.62 semester hours of coursework that primarily or only addresses special education (this is 12.8% of professional education requirements); and
    - 8.37 semester hours of course work that refers to some of the 11 diversity categories (this is 12.5% of professional education required hours).

- The most commonly referred to diversity categories in ECTPP course descriptions and program reviews are *special needs, culture, diversity, language, and learner characteristics.*

- The least frequently referred to diversity categories in ECTPP course descriptions and program reviews are *minorities, immigration status, race,* and *social class.*

- 7% of ECTPP require a student internship in a setting described as 'diverse', 'multicultural' or in some other way suggests the program expects the student teacher will gain experience with children of color, second language learners, children from many cultures and ethnicities, immigrant, poor and/OR special needs children.

- 29% of ECTPP have a general education foreign language requirement.

- NCATE and non-NCATE accredited ECTPP do not differ substantially in terms of semester hours of courses that reference diversity categories; requirement of an internship in a 'diverse' setting; and frequency of use of diversity content in course descriptions and program reviews.

- Colleges and universities historically dedicated to the education of underserved populations (CUUP) require on average 2 fewer semester hours of courses that reference diversity categories than do majority or MCU ECTPP; but a greater percentage of CUUP institutions (12%) require a student internship in a 'diverse' setting than do MCUs (7%); while slightly more MCUs (29%) than CUUPs (27%) require a foreign language.

## DISCUSSION

Ample evidence was found that indicates teacher preparation institutions recognize the developmental and educational needs of children of color, children with special needs, low-income children, immigrants, and second language/dialect speakers as relevant to knowledge and practice of early childhood teachers. Although the study did not determine exactly how long diversity has been mentioned in college coursework in each state, certainly major efforts to address this issue have come largely in the last 50 years. Three factors contribute to this interest in the United States: movements by disenfranchised groups for social change and equity influenced beliefs, attitudes, and behaviors regarding their rights; world wide competition for educational leadership awakened concerns about the quality of the nation's schools and educational achievement of all children; and immigration and demographic changes emphasized the importance of teaching children from different cultural and

linguistic backgrounds. Despite the obvious interest of teacher education programs in the developmental and educational needs of children of color, second language/dialect speakers, and others the findings suggest that *few hours of coursework and little practice is devoted to teaching early childhood teachers how to be effective educators of them, and work with their families and communities*. The results suggest that early childhood teacher education programs convey an unambiguous message to future teachers—*professional competence requires weak and uneven knowledge and practice skills in educating children who have special needs, children of color, children who are low-income, immigrants, and second language/dialect speakers*. The developmental and educational needs of *all* children simply *do not* appear to be at the center of teacher preparation coursework and practice. In light of these results it is not surprising that teachers report their professional training has not prepared them for all the children they educate (Association for Children on New Jersey's Early Learning Initiative, 2005; Kearney & Durand, 1992; Ray & Bowman, 2003). Therefore, institutions of higher education should pursue three strategies to substantially improve children who represent the complexity of cultures, languages, abilities, races, and ethnicities present in early childhood classrooms: 1) Conceptualize a comprehensive pedagogy that fully integrates developmental theory with knowledge of all groups and types of children, families and communities; 2) transform the faculty in teacher preparation institutions; and 3) recruit and retain new leaders—develop and articulate a workforce agenda and career ladder that assures diversity, quality, and connects child success to high quality early experiences.

We recognize that the proposed changes require re-conceptualizing and reformulating the knowledge base, practice experiences and dispositional capacities required of future early childhood teachers. This in turn necessitates changes in institutions of higher education, specifically in program requirements, pedagogy, and in faculty capacities. The implementation of these changes will not be easy, but we are certain that they are essential if early childhood teachers are to be effectively prepared to assure the optimal development and educational achievement of *all* children. Significant barriers will need to be surmounted to achieve these goals, specifically influencing systems, organizations, institutions and individuals that shape early childhood teacher education, e.g., state boards of higher education, professional accreditation organizations, and professional organizations of teacher educators (see Ray et al., 2006). For example, both institutional and professional accreditation bodies (e.g., NCATE, NAEYC) must exert their considerable influence through the development of teacher standards that consistently and specifically address the developmental and educational needs of *all* children. But our primary recommendations address immediate changes in pedagogy, instruction and practice experiences of early childhood teachers—changes that are shaped in large part by higher education faculty.

Constraints that may influence change within institutions of higher education may include *institutional capacities* (e.g., funding; capacity to change); *capacities within the faculty* (e.g., availability of faculty or consultants with sufficient expertise regarding the development and education of children of color, second language learners and dialect speakers; reluctance to acknowledge and alter the privileging of Euro-centric views of child development; failure to gain departmental or institutional support; commitment of time and energy); and *market*

*constraints* (e.g., if program requirements are increased to adequately address the educational needs of all students will teacher education programs become too expensive for many students and will alternative certification programs become more attractive). One obvious tension exists between our assertion that teachers need more specialized knowledge of children's developmental and educational needs (e.g., second language learning, cultural background), 67 average credit hours of course work required in most programs, and the reported (Bowman et al., 2001) insufficiency of domain specific knowledge and practice with diverse students of early childhood teachers. If deeper knowledge of the development and educational needs of second language learners, children of color and children with special needs is to be incorporated into teacher education how should that be done? What is the necessary knowledge base for early childhood teachers who are competent to teach all children? For example, given that English as a Second Language and special education have been discrete areas of educational expertise, how can they be incorporated into early childhood education without making program requirements onerous? How should practice experiences be conceptualized to assure sufficient quality experience for student teachers? Do the number of credit hours need to be increased? How should induction supports during the first two years of in-service teaching contribute to the development of teachers' expertise in working with all children?

**RECOMMENDATIONS**

College and university bachelor's degree early childhood teacher education programs must:

- Develop knew educational pedagogies that effectively provide prospective early childhood teachers with knowledge regarding the development of all children. These must be based on carefully thought out and detailed rationales regarding the relationship of *all* children's developmental and educational needs to teaching and learning. Central to the development of a knew educational pedagogies is evaluation of how and what research, theories, and practices have been taught across higher education curricula regarding children of color, low-income children, immigrants, second language/dialect speakers, children with special needs, and their families and communities. Language used to describe characteristics of children associated with educational outcomes (e.g., race, language) should be clearly articulated.
- Require all prospective early childhood teachers have training in English as a second language (ESL) and knowledge regarding how bilingualism and bi-dialectism influence teaching and learning.
- Create forums, processes and strategies for developing metrics for the assessment of prospective early childhood teachers' competence to work with children of color, low-income children, immigrants, second language/dialect speakers, children with special needs, and their families and communities.
- Require student practice with children and families who represent many cultures, races, ethnicities, social classes, languages, and special needs.
- Provide graduates forums, seminars and activities (e.g., induction seminars, continuing education) that support their professional growth in effective work with all children and families especially in the first years of entering teaching.

- Explicitly address in course requirements issues of inequality, bias, and discrimination in the creation of a just society, and attend to faculty and teacher values, beliefs, biases, prejudices, and commitment to professional practice that supports equity and social justice.
- Provide incentives (e.g., scholarships, mentoring, induction) that will contribute to the development of an early childhood workforce that reflects the diversity of children and families served in programs. Recruit and retain students of color, students for whom English is a second language or dialect, and students from impoverished communities into the field and teaching.

The following are recommendations to foundations and others who seek to support the development of educational achievement for all children through improving teacher education programs:

- Create prestigious, high profile competitive grants to early childhood teacher preparation institutions that propose to evaluate and re-design pedagogy, curriculum, and practice to more effectively educate all children. These grants should require significant administrative buy-in (e.g., release time for faculty).

- Convene a working group of individuals from institutions of higher education with expertise such as, child development in context, bilingualism, bi-dialectism, early childhood education of African Americans, Native Americans, Mexican Americans, and Asian Americans, to develop a comprehensive pedagogy for the education of all children that, includes knowledge, practice, and assessment components. This effort should be: supported for a realistic period of time (e.g., 3-years); involve consultation and review by additional experts and practitioners; result in a final report that is presented in a number of venues (e.g., NAEYC, NBCDI, NABE); and the final report should be disseminated widely.

- Provide support (e.g., for scholarships, mentoring, induction, tutoring, faculty institutes) to early childhood teacher preparation programs that develop innovative plans to recruit and retain students of color, second language/bi-dialectic, immigrants, and others.

- Provide support (e.g., fellowships, grants) to early childhood teacher preparation program faculty that develop innovative plans to recruit and retain faculty of color, second language/bi-dialect speakers, immigrants, and others.

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# INTRODUCTION

## TEACHING AND SCHOOL SUCCESS FOR *ALL* CHILDREN[2]

American schools have held the promise of equal opportunity for generations of children regardless of background or circumstance. The guarantee of educational equity for all Americans is presumed to assure a fair chance at economic and social opportunity where all can achieve through perseverance, hard work, and determination (Moses, 2002). Opportunity, equality, and individual effort are the mantras of American educational mythology. But, these powerful cultural beliefs are contradicted by the reality of schools that across generations replicate and reinforce structural inequalities based on race, social class, language, ethnicity, gender, and disability (Banks & Lynch, 1986; Moses, 2002; Ray, 2000).

The urgency to understand how children's characteristics (e.g., race, social class), teaching, and children's school success intersect is driven by the greater likelihood that low-income children, children of color, immigrant[3] children and others are more likely to have poor educational outcomes than White children; changing demographics; and concern regarding the ability of all teachers to adequately teach children from backgrounds different from their own.

*Educational Outcomes.* Children from poor communities of color, poor children of immigrants, children for whom 'standard school' English is a new language or a second dialect, and children with behavioral, psychological or medical challenges are at greater risk of school failure than their middle class, monolingual, able bodied White peers. Dissimilarities in children's educational attainment appear early (Bondy & Ross, 1998; Bowman, Donovan & Burns, 2001;

[2] Throughout this paper we use the term 'all children' to mean children typically referred to as 'diverse' or 'minorities' including but not limited to children of color, immigrant children, second language and dialect speakers, low-income children, immigrants, and children from all cultural and ethnic traditions. We do not exclude the developmental and educational needs of White middle class, able bodied, monolingual children from this construct. This term implies equity, inclusion, and investment in all children's developmental and educational needs in teaching and learning in early childhood classrooms, and at all levels of professional development and training.

[3] Our use of the term immigrants refers to two groups—children born in the U. S. who are citizens, but whose parents where born elsewhere, and children born outside the U. S.

Knapp & Associates, 1995). For example, in comparison to their white middle class peers poor and minority children are more likely to have lower educational achievement in reading and math; and be disproportionately assigned to special education classrooms. More money continues to be spent on the education of White students than students of color; schools are more likely to discipline students of color more severely than White students; and poor children and children of color are more likely to attend schools that are poorly equipped in which teachers are less experienced and less well prepared to educate them (Kozol, 1999). All are enduring legacies of unequal education and social injustice.

*Changing Demographics.* America has always been a multilingual, multicultural, multiethnic, and multiracial society (Garcia, 2005; Irvine, 2003; Jones & Black, 1995; Ray 2000). But currently the U. S. is undergoing profound racial, cultural, generational, and linguistic changes. It is simply becoming younger and more nonwhite (Maharidge, 1996). In 1998 the United States Census Bureau reported that people of color comprised 28 percent of the population, but estimated that they will be 47 percent of the population by 2050 (U. S. Bureau of the Census, 1998). One-quarter of all 3- to 9-year-old children have parents who were born outside the U. S.; over one-third of 3- to 9-year olds are children of color (e.g., African American, Latina/o, Native American, Asian American and Pacific Islanders) (U. S. Bureau of the Census, 1999); and children of color are the majority in 25 of the largest U. S. school districts (Gay, 1995). In addition, growth of particular racial/ethnic/cultural groups is increasing faster than others. For example, the percentage of children who are Latina/o has increased faster than that of any other racial or ethnic group, growing to 19 percent of the child population in 2003. By 2020, it is projected that nearly 1 in 5 children in the U. S. will be of Latina/o origin (Federal Interagency Forum on Child and Family Statistics, 2005). One-quarter of Head Start children

(Head Start Bureau, 2000), and nearly one-fifth of school-age children speak a language other than English (Federal Interagency Forum on Child and Family Statistics, 2005). One in five American children are poor, but poverty affects children of color disproportionately. African American and Latina/o children have poverty rates twice that of White children (Children's Defense Fund, 2000, p. 5). Further, 5 percent of U. S. children between birth and 5 years of age are children with special needs (U. S. Bureau of the Census, 1994). In addition, the nature of American families is changing. A majority of mothers are in the workforce, single parents head a significant proportion of all families, and many families need two working parents to make ends meet (Bureau of Labor Statistics, 1999). These changes require early childhood teachers (Pre-K to early elementary grades) who are adequately prepared to effectively teach young children who have complex and varying developmental and educational needs, and represent all communities and groups present in U. S. early childhood classrooms.

*Teacher preparation programs*. The failure to adequately prepare teachers who can educate all children has been identified as evidence of pedagogical, instructional and conceptual problems in teacher preparation (Dieter, Voltz, & Epanchin, 2000; Irvine, 1990; Ladson-Billings, 1999; Ray, 2000; Voltz, 1998). Teacher education programs are social institutions in which knowledge is organized and produced through processes of exclusion and inclusion. These processes are embedded in and reflect historical, political and social arrangements that generally benefit groups with power and privilege (Giroux, 1996). Curriculum and teaching practices are areas in which groups representing competing societal interests (such as, monolingual versus bilingual education) have struggled over what knowledge will be taught, which 'voices' will be heard or silenced, and ultimately how social power and advantage will be distributed in society. Early childhood teacher education programs may through instructional practices, pedagogy and

curricula reward and privilege the developmental and educational needs of certain groups of children over others thereby reproducing inequality (Gay, 1986; Giroux, 1996; Irvine, 2003; Ladson-Billings, 1995; Ray, 2000).

Teachers—their training, dispositions, subject knowledge, ability to understand the children, families and communities—are the most important factor in the educational enterprise (Bowman, Donovan & Burns (2001). Research on teacher preparation in early childhood classrooms has focused on improving classroom instructional practices, increasing early childhood teachers' reflective practice, reshaping content of professional development, and increasing the number of minority and bilingual teachers. Significantly less attention has been given to how children's characteristics (e.g., race, culture, language, ethnicity, special needs) have been addressed by the organizational infrastructure that defines and even mandates early childhood teacher standards, accreditation and credentialing (Miller, Strosnider & Dooley, 2002; Tom, 1996). This infrastructure includes an amalgam of entities, such as state boards of higher education, professional accreditation organizations[4], and institutions of higher education. The relative emphasis they give to the developmental and educational needs of children of color, second language learners, children from many cultures and ethnicities, and immigrant, poor and special needs children may signal to teachers how critical these children's educational success *should be* to their professional preparation and competence. Despite their central role in early childhood teacher professional development there is a dearth of research that examines the contribution of undergraduate teacher education programs to assuring that these capacities and

[4] For a discussion of the role of teacher standards of state boards of higher education and accreditation organizations see, Ray, Bowman & Robbins (2006). *Preparing Early Childhood Teachers to Successfully Educate <u>All</u> Children: The Contributions of State Boards of Education and Accreditation Organizations*, A Report to the Foundation for Child Development, New York, NY. Project on Race, Class and Culture in Early Childhood, Erikson Institute, Chicago, Illinois.

skills are central to early childhood teacher competence. The present study attempts to examine this role and makes a contribution to filling this void, but in order to do so we first discuss problems in conceptualizing the developmental and educational needs of all children, and the role of early childhood teacher education programs in preparing teachers who can effectively educate all children.

## Conceptualizing the Educational and Developmental Needs of All Children

In early childhood research and practice literatures the educational and developmental needs of children who have special needs, children of color, and children who are low-income, immigrants, second language learners and second dialect speakers are often clustered under the construct of 'diversity'. The roots of the notion of diversity and diverse children lie in American economic, political and social injustice. Specifically, our current concern with 'diversity' can be traced to U. S. social movements led by disenfranchised groups including African Americans, Mexican Americans, Native Americans, women, the disabled, gays and lesbians, who have demanded and fought for the elimination of *de facto* and *de jure* oppression, segregation, and discrimination. Despite these origins the concern about 'diversity', 'diverse children, 'minority children' in early childhood teacher preparation has focused more on awareness of children's differences and less on equity, shared power and redistribution of resources. We contend early childhood teacher preparation research and practice literatures are characterized by a 'diversity discourse' that has four conceptual problems that contribute to a lack of specificity and clarity in addressing the developmental and educational needs of children and their relationship to teaching and learning. These are: 1) a tendency to dichotomize children's developmental needs into 'mainstream' and 'diverse' which privileges the former; 2) a tendency to refer to a very complex population (e.g., children with special needs, poor children) with different developmental and

educational needs under a single construct (e.g., diverse) which risks perpetuating misunderstanding and poor educational outcomes; 3) a tendency to address one or two characteristics (e.g., race and culture, language and culture) of children despite the fact that children are more than the sum of these characteristics; and 4) a tendency to insufficiently address how teachers are to assure the educational success of all children in intergenerational, multi-cultural, multi-ethnic, multi-class, multi-racial, multi-lingual and multi-ability classrooms.

*'Diversity' compared to what?—Privileging 'mainstream' development.* Research and practice literatures frequently differentiate the educational needs of so-called 'mainstream' versus 'diverse' or 'majority' versus 'minority' children. This dichotomy may explicitly and implicitly suggest to teachers that the developmental and educational outcomes of White, middle class, able bodied, monolingual children are the standard by which children of color, poor children, second language learners, children with special needs, and children from ethnic, cultural and racial groups are to be judged. Research grounded in ethnocentric developmental theories that is conducted on 'diverse' children (e.g., low-income, African American, Mexican immigrant) that conclude they are 'disadvantaged', 'deficient', 'deviant' or 'at-risk' have been criticized for theoretical and methodological biases (Irvine, 2003; Ladson-Billings, 1999; Pewewardy, 1994; Vàldes, 1996). Yet, prospective teachers in early childhood teacher education programs are often expected to master theories that may be inappropriate for the children they teach, and research that may implicitly suggest these children, their families and communities are deficient. We acknowledge that students are often encouraged to critically evaluate these theories and research, but we are not convinced that students are able to make use of these critiques in their practice with actual children. For the preparation of early childhood educators the possible consequences of these problems in theory and research are that they may encourage

teachers: 1) to view the developmental and educational needs of so-called 'diverse' children as essentially the same as those of so-called 'mainstream' children without actually considering how their needs might differ; 2) to not examine or consider family and community expectations for children's development especially if they differ from those of middle class, White, monolingual parents (Vàldes,1996); and 3) to learn 'scientific' theories and research that justify and reinforce unexamined biases students may hold about children of color, poor children, children of immigrants, second language learners, and children with special needs.

*'Diversity' masks complex developmental and educational needs of children.* The 'diversity' construct and its proxies (e.g., diverse children, culturally and linguistically diverse children, minority children) may mask of obliterate the specific developmental and educational needs of children. This is particularly problematic in discussions that do not detail for teachers the developmental and educational needs of children with sufficient specificity to guide teaching and learning. For example, the term "minority children" is both increasingly inaccurate and potentially dangerous. It throws together children who by some measure (e.g., race, class) are not White or middle class and risks maintaining a racist, social class and other hegemonies, implying that White, monolingual, middle class, able bodied children are the norm; it ignores the rapidly changing demographics that have begun to challenge the utility of such notions as 'majority' and 'minority' groups; it ignores how individuals and groups identify themselves; and it implicitly gives permission to ignore differences in children due to factors (e.g., race, culture) that may have implications for teaching and learning.

For the preparation of early childhood educators the possible consequences of masking salient characteristics of children may encourage teachers to engage in a kind of diversity reductionism—concluding that children who are described as 'diverse' or 'minorities' need

similar types of educational teaching and learning strategies. The opposite appears to be the case. For example, effective teaching of young children for whom English is a new language or second dialect necessitates teachers specially trained in language development of both monolinguals and bilinguals (Fillmore & Meyer, 1992; Fillmore & Snow, 2000; Garcia, 2005; Menken & Antunez, 2001). Children with special needs (e.g., autism, attention deficit disorders, dyslexia, speech disorders) must have teachers trained to assure their educational and developmental success (Kalyanpur & Henry, 1999). Children from culturally diverse communities, poor children, and children from marginalized racial groups have better educational outcomes when teachers have knowledge and practice skills that support home culture and language (Au & Mason, 1981, 1983; Dee, 2004; Knapp & Associates, 1995; Pewewardy, 1994).

*Individual children have complex identities and complex educational and developmental needs.* The 'diversity' discourse may lead teachers to focus on discrete characteristics of children (e.g., race, or race and social class) and thereby fail to incorporate additional salient factors of children's identities (e.g., gender, religion) that may influence developmental and educational outcomes. Research (Phinney & Rotheram, 1987; Waters, 1996; Zentrella, 1997) and autobiography (Khu, 2001; Liu, 1998; Shyer & Shyer, 1996) have shown that the construction of identity by individuals and groups is multi-layered, complex and dynamic. For example, individuals, including young children, do not appear to define themselves by one construct, such as race, but assemble a complex and evolving identity that may include gender, race, ethnicity, social class, language, age, physical and mental capacities, religious/philosophical worldview, and experience (Phinney & Rotheram, 1987; Tatum, 1997; Zentrella, 1997). In actual early childhood classrooms teachers encounter young children that

have multiple characteristics by which they define themselves, they may include a Dominican–American girl whose first language is Spanish and maneuvers through the classroom in a wheelchair and her best friend a second-generation Japanese-American boy whose first language is English and has mild dyslexia. It is this complexity, multiplied across thousands of U. S. classrooms, that challenges early childhood teachers, their preparation, and the knowledge of teacher educators.

The implications for teacher educators of this complexity are: 1) that teachers have to successfully educate children who are not *just* Spanish speakers or *just* Japanese-American, but children who come from many backgrounds combine multiple capacities and complex identities; 2) in the face of the complexity of children's developmental and educational needs teachers, especially if not effectively prepared, may retreat to practices that simply 'celebrate' differences, but do not address children's actual differences as they are expressed in teaching and learning processes; and 3) teacher education programs must help teachers understand this complexity and its implications for teaching and learning in early childhood classrooms.

*Preparing teachers for today's multi-cultural, multi-ethnic, multi-class, multi-racial, multi-lingual and multi-ability early childhood classrooms.* Because it generalizes and over simplifies children's developmental and educational needs the 'diversity discourse' does not help teachers understand how to effectively teach children in today's early childhood classrooms. Early childhood classrooms are meeting grounds that reflect modern American society in all its complexity. This is especially true in large urban school districts but increasingly characterizes classrooms in every area of the U. S. (Violand-Sanchez, Suton & Ware, 1991). For example, in Chicago, and other large cities, the typical early childhood classroom operated by the Chicago Public Schools is multi-lingual, -cultural -racial, and -ethnic with children representing cultures

and languages from Asian, Africa, Europe, the Carribean, Central American, and Latin America as well as native born Americans from different cultural and language traditions. As U. S. classrooms grow more racially, culturally, and linguistically complex the majority of teachers (78-97 percent) remain predominately White, able bodied, monolingual and middle class (Darling-Hammond, Pittman & Ottinger, 1987; National Education Association, 2004; Saluja, Early & Clifford, 2002). But the characteristics of children (e.g., race, ethnicity, social class, culture) are not only a challenge for White teachers—all teachers encounter children with characteristics and backgrounds different from their own. African Americans teach Mexican American children, females teach male students, able-bodied teachers teach children with physical disabilities, straight teachers educate gay children, teachers fluent only in English instruct children fluent only in Cantonese, and middle class teachers serve children who are poor. And, even when teachers and young children share a common cultural, linguistic, ethnic, racial or class background they may not be able to translate their own experiences into effective educational practices that benefit children (Zeichner, 1996, p. 133). The implication for teacher education programs is that they may need significant change in many areas (e.g., faculty development, pedagogy, curriculum, student practice and clinical experiences) in order to effectively prepare *all* early childhood teachers who are able to competently educate *all* children and their families.

## Early Childhood Teacher Preparation for All Children

Highly qualified early childhood teachers *specifically trained to work with effectively with children and families from many different communities and with varying and complex developmental and educational needs* are essential if early childhood programs are to provide the foundation that helps all children succeed in school. Five reasons can be advanced to explain

why highly qualified early childhood teachers *specifically trained to work with all children* are singularly suited to improve educational outcomes: 1) young children are in the process of beginning to develop social expectations for themselves and others that affect their emotional and social competence; 2) greater numbers of young children than ever before spend increasing portions of time in settings that include children and adults who represent various cultural, ethnic, racial, social class, ability, and language groups and with adults other than their parents; 3) early childhood teachers play a powerful role in forming children's attitudes about themselves and others; 4) teachers' ability to use children's home culture and language in class instruction is associated with improved educational outcomes; and 5) early childhood programs commonly include parent education programs or parent involvement strategies that require them to be sensitive to all the families they serve. Influencing what young children learn from interactions in early childhood settings can be important for altering children's attitudes and beliefs about themselves and others, their adjustment to school, educational achievement, and their behavior toward people from different backgrounds. Appropriately trained teachers are a keystone of such change.

Research (Banks, 1993; Banks & Lynch, 1986; Derman-Sparks & Phillips, 1997; Gay, 1995; Tom, 1997; Vavrus, 2002) suggests that educational and pedagogical practices designed to support equity and ameliorate social, racial, cultural and economic inequities are dependent upon the transformation of teachers and teacher education. Vavrus (2002) asserts that, "teachers with recognized teaching credentials and advanced degrees may lack the multicultural repertoires and sensibilities appropriate for providing the kind of academic and social help their students need under conditions of racial discrimination and poverty" (p. 16). In addition, as we suggested earlier children with particular characteristics associated with poorer educational outcomes (e.g., poverty,

not proficient in English) may require teachers with specialized knowledge and practice skills that support their school achievement.

Teachers' beliefs about children of color, poor children, second language and dialect speakers, and immigrant children suggest that they have little knowledge of the families and communities that have nurtured children in their classrooms (Pang & Sablan, 1998; Vàldes, 1996); express ideologies that support the social, political, and racial status quo (Howard, 1999; Sleeter, 1993); doubt their ability to effectively teach African American children (Pang & Sablan, 1998); frequently deny or fail to address children's racist behavior in schools (Rizvi, 1993; Van Ausdale & Feagin, 2001); and feel unprepared to teach in multicultural and multilingual classrooms (Ray & Bowman, 2003; Valli & Rennaert-Ariev, 2000). Moulty (1988 cited in Grant & Secada, 1990) found that almost 40 percent of pre-service teachers did not believe that institutionalized racism influences the experiences of minorities, were not aware how teachers' and students' beliefs, values, biases, and stereotypes might influence learning and teaching, and did not believe that educators could significantly affect how teaching professionals think about learners in a diverse society.

An additional factor, namely the efforts of teacher educators (i.e., teacher college classes on multiculturalism and in-service training) to change teachers' stereotyped attitudes towards racial, ethnic, and cultural groups have had only moderate success (Webb-Johnson, Artiles, Trent, Jackson & Velox, 1998), and there is a dearth of longitudinal research that investigates whether positive interventions have lasting effects on teaching practices. Further teachers' report not feeling adequately prepared to educate children who are culturally and linguistically different from them. Early childhood teachers with 5 or more years of experience report (Ray & Bowman, 2003) that they had learned to work effectively with culturally and linguistically different children from the

children, families, and other teachers, but not from their teacher training programs. Ryan, Ackerman, & Song (cited in the Association for Children on New Jersey's Early Learning Initiative, 2005) found that the majority of preschool teachers they interviewed felt that their pre-service training inadequately prepared them to teach children from diverse cultural and language backgrounds (p. 3). Despite the attention early childhood teacher preparation programs have given to children with special needs who are mainstreamed evidence (Kearney & Durand, 1992) suggests teachers feel unprepared to provide for the educational needs of children with disabilities. In addition, very little research has been done on the degree to which teacher preparation programs nationally or within states incorporate content and requirements that prepare teachers for competence in educating all children, including children of color, second language learners, children from many cultures and ethnicities, and immigrant, poor and special needs children.

## Early Childhood Degree Requirements: Research Focus

Nationally, the vast majority of teachers working in early childhood public school classrooms have bachelor's degrees. Yet fewer than fifty percent of head teachers in preschool classrooms with three- and four-year old children have this credential (Whitebook, Bellm, Cruz, Munn, Jo, Almaraz, & Lee, 2004). However a growing consensus of early childhood educators support more rigorous requirements for teacher preparation including academic subject content, child development, and knowledge of appropriate teaching practices (Bowman et al., 2001; Darling-Hammond, 2000; National Commission on Teaching and America's Future, 1996). The national movement toward both teacher standards and learning standards for children has influenced the growth of this consensus, and presumably influenced requirements (e.g., coursework, clinical experiences, *practica*) defined by institutions of higher education. Standards of national accreditation organizations (e.g., NAEYC) and state boards of education

do reflect expectations that early childhood teachers will demonstrate competence in teaching children with a variety of backgrounds and characteristics (e.g., race, social class, ethnicity, second language, special needs) (see Ray et al., 2006). Federal legislation, such as *No Child Left Behind* (NCLB), the Bush administration's effort to ameliorate failing schools, also stresses improving teaching and the placement of "a highly qualified teacher in every public school classroom by 2005" (U. S. Department of Education, 2002, p. 2).

*Bachelor's Degree Institutions of Higher Education: Early Childhood Teacher Education Degree Requirements and* All *Children*. Teacher education programs are of interest because of the growing consensus that young children deserve highly qualified teachers (Bowman, et al., 2001) and the pivotal role they play in educating the vast majority of teachers in U. S. classrooms. A central concern of this research study is the extent to which bachelor's degree early childhood teacher education program requirements indicate that teachers learn content and practice skills that address the educational and developmental needs of children in U. S. early childhood classrooms including children of color, second language learners, children from many cultures and ethnicities, and immigrant, poor and special needs children.

The following research questions are addressed in this study:

Q1. In bachelor's degree teacher preparation programs that prepare early childhood teachers how many semester hours of required course work indicate that courses address the developmental and educational needs of children who have special needs, children of color, and children who are low-income, immigrants, second language learners, second dialect speakers and from many cultures and ethnicities?

Q2. Which of 11 diversity categories (e.g., race, language) appear in early childhood professional education course descriptions and to what extent do particular diversity categories (e.g., special needs) appear relative to other diversity categories?

Q3. Which of 11 diversity categories appear in the program descriptions?

Q4. How many bachelor's degree teacher preparation programs require student internships in settings defined by the program as 'diverse', 'multicultural' or including children of color,

second language learners, children from many cultures and ethnicities, immigrant, poor and special needs children?

Q5. How many bachelor's degree teacher preparation programs have a foreign language general education requirement?

Q6. Do bachelor's-degree teacher preparation programs with and without National Council for Accreditation of Teacher Education (NCATE) accreditation differ in the number of semester hours of diversity content course work; diversity content in program reviews and course descriptions; the requirement of student internship in a 'diverse' setting; and a foreign language general education requirement?

Q7. Do bachelor's degree teacher preparation programs that historically have educated underserved populations (e.g., African Americans, Latinos/-as, Native Americans, and the Deaf), differ substantially from 'majority' institutions in the number of semester hours of diversity content course work; diversity content in program reviews and course descriptions; the requirement of student internship in a 'diverse' setting; and a foreign language general education requirement?

## LIMITATIONS OF THE STUDY

Application of the findings from this study should be considered in view of the following issues. Data were drawn from on-line sources maintained by bachelor's degree teacher preparation programs, and so may reflect errors that are the result of website design, maintenance and development. Although we contacted faculty and staff in bachelor's degree teacher education programs to ascertain the degree to which content reflected current requirements and policies, in a few cases, personnel could not confirm or were unaware of the status of the content of on-line documents, and could not direct us to current documents. The present study does not examine the quality of instruction and training within bachelor's degree early childhood teacher education programs. The findings on higher education and teacher preparation do not reflect training that occurs in 2-year higher education programs, professional development training or alternative teacher preparation programs. Results from this study need to be evaluated in relation

to this limitation. Data collection occurred between June 2003 and July 2004. Data analysis only reflects documents available and examined during that period of time.

## METHODS SUMMARY[5]

*Sample.* A pool of 662 colleges and universities that prepare bachelor's degree level teachers was created through the use of 8 national resources and datasets (e.g., Integrated Postsecondary Education Data System [IPEDS]; *National Directory of Early Childhood Teacher Preparation Institutions-2003*) (see Appendix B). Included in the 662 early childhood teacher preparation programs (ECTPP) are 37 colleges and universities that historically have served underrepresented populations or CUUP (e.g., historically Black colleges and universities, Hispanic institutions). CUUP institutions were identified through resources such as the United Negro College Fund, Hispanic Association of Colleges and Universities, and the *Tribal Council Journal* (see Appendix B). The 662 ECTPP were evaluated to determine if they met study criteria: 1) the program offers a bachelor's degree in early childhood education or enables bachelor degree graduates to receive initial, provisional or permanent certification to teach in early childhood classrooms (Pre-K—early elementary grades); 2) the program prepares teachers to teach in pre-kindergarten (e.g., age 3) to early elementary grades (e.g., 3rd, 4th); and 3) the program is accredited by NCATE or a regional accreditation body. Where possible, we sought a total of 6 public and private ECTPP in each state and District of Columbia (D. C.)—the 2 largest (entire student population $\geq$ 9001), 2 small (entire student population $\leq$ 9000), and 2 additional programs of either size. Twenty-four states and D. C. had fewer than 6 eligible ECTPP, and in these states all programs were included. Twenty-one states had 7 or more ECTPP, and programs were randomly selected that met all study criteria (see Appendix A. Table 9). Two hundred twenty-six bachelor's degree institutions of higher education met all criteria and form the basis of analysis (see Appendix

[5] For a complete description of methods see Appendix A.

C). Five states were excluded from the analysis of ECTPP because they did not meet one or more of the criteria for inclusion in the study.

The final sample of 226 represents one-third of accredited U. S. bachelor's degree programs training early childhood teachers. The sample of early childhood teacher preparation programs includes 26 programs historically serving: African American students (10% of sample), Hispanic students (.44%), Native American students (.44%), and Deaf students (.44%) (see Appendix A. Table 12). The entire sample of 226 schools has the following characteristics: 80 percent offer degree concentrations in early childhood only, and 20 percent in various other combinations of degree programs (e.g. early childhood and bilingual early childhood, and early childhood special education) (see Appendix A Table 10); and 44 percent have student populations ≤ 9000 and 56 percent have student populations ≥ 9001 (see Appendix A Table 11).

*Data Collection and Analysis.* We analyzed undergraduate requirements available on-line for text that included references, phrases, terms and language related to children's characteristics, such as race or language. After preliminary evaluations of teacher education requirements we identified categories of language that referenced children's characteristics (e.g., race, culture) and created coding categories for them. Eventually eleven coding categories of children's characteristics typically associated with 'diversity' emerged from this process. They include *race, ethnicity, culture, language, immigrant status, social class, special needs, all children, diversity, minorities and learner characteristics.* We refer to the use of these categories of children's characteristics in early childhood teacher education as *diversity content* and the specific categories as *diversity categories*. Terms that reference children's characteristics (e.g., gender, religion, sexual orientation) and language that referred to social justice (e.g., equity, anti-bias) were so rarely found that we coded them as 'other'. All teacher

education documents were coded using these 11 categories (see Appendix A for a full description of coding and data analysis procedures).

Researchers established decision rules and a database to gather 24 categories of data (see Appendix D) from websites of the 226 institutions intended to answer all research questions. Six types of evidence were sought:

> 1) Semester hours of required *explicit diversity* professional education courses that indicates in the course title and description that the course addresses *diversity content* through the presence of language that references *11 diversity categories* (e.g., race).
>
> 2) Semester hours of required *embedded diversity* courses in which the title does not include a reference to *diversity categories* but the course description indicates that *diversity categories* (e.g., second language learners, children with special needs) are addressed in the course.
>
> 3) Required student teaching internship in a setting that the program describes as 'diverse', 'multicultural' or in some other way indicates to the student that the expectation is that the student will gain experience with children who have special needs, children of color, children who are low-income, immigrants, second language learners and second dialect speakers.
>
> 4) General education requirement of a foreign language.
>
> 5) Semester hours of required courses that only or primarily addresses special education.
>
> 6) The program's statement of its mission in relation to teacher preparation (referred to in this study as a 'program review') contains diversity content.

In addition, we compared course requirements that primarily address special education and those that address ten other areas of children's characteristics (e.g., culture, language). The influence of NCATE-accreditation on requirements was evaluated by comparing NCATE accredited and non-accredited schools on the requirements described above. CUUP and majority institutions were similarly compared. Faculty and staff in bachelor degree teacher education programs were interviewed for clarification of questions and issues that emerged as coding and data analysis commenced.

The statistical analyses used throughout are descriptive—tallies, percentages, ranges, and ratios. The data does not support the use of *t*-tests or other more elaborate statistical analyses. The intent of authors of bachelor's degree requirements in language usage that refers to children's race, social class, ethnicity and similar characteristics is beyond the scope to this study. It appears that some types of language may be used interchangeably (e.g., culture and ethnicity, race and ethnicity). Because of this the principal investigators felt that language and terms used to refer to children's characteristics (e.g., race, social class) do not always form discrete mutually exclusive categories (despite our attempt to impose order on them).

## FINDINGS

Q1. In bachelor's degree teacher preparation programs that prepare early childhood teachers how many semester hours of required course work indicate that courses address the developmental and educational needs of children who have special needs, children of color, *children who are low-income, immigrants, second language learners, second dialect speakers, and children from many cultures and ethnicities?*

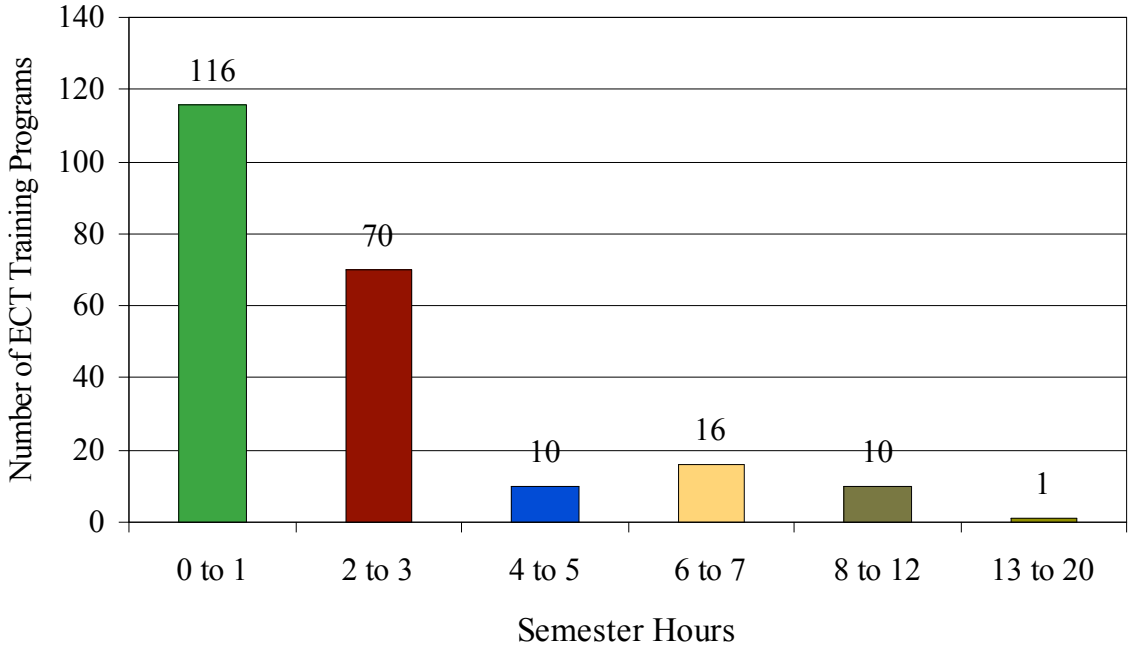
In order to answer this question we examined the degree requirements early childhood teachers have to meet in 226 bachelor's degree institutions of higher education. Degree requirements include professional course requirements and the type of student internship. *Explicit* and *embedded diversity courses* that refer to children's developmental and educational needs in relation to any of the 11 diversity categories of interest is discussed. Finally, the relative percentage of required semester hours of special education versus those that address other diversity categories (e.g., race, culture) is compared.

Figure 1 indicates that 52 % (n=116) of teacher training institutions preparing early childhood teachers require on average none to 1 semester hour (*Range* 0-20) of explicit diversity course work. Explicit courses are those with diversity categories

Figure 1. Number of Bachelor's Degree Early Childhood Teacher Training Programs with

Required Explicit Diversity Semester Hours

(*N =223; Mean* = 2 semester hours; *Range* 0 to 20)

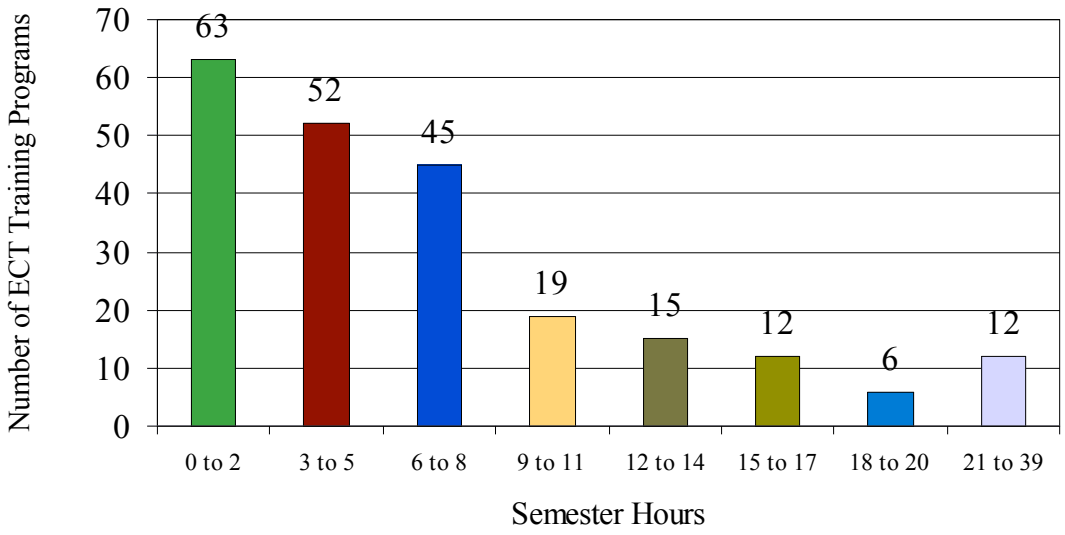



(e.g., race, culture) in the course title and course description. Less than one-third (n=70) of teacher training institutions require 2 to 3 semester hours. Only 4 % of programs (n=10) require 4 to 5 and 8 to 12 semester hours, and 7 % (n=16) require 6 to 7 semester hours. Only one institution of higher education in our sample of 223 requires 13 to 20 semester hours of explicit diversity course work.

We calculated the average number of embedded diversity content (e.g., race, culture) semester hours for 224 of 226 bachelor's degree institutions of teacher education (semester hours for two cases could not be determined). Embedded courses are those in which the diversity content appears in the course description, but not in the course title. On average early childhood teacher education programs require 6 semester hours of embedded course work (*Range* 0-39) (see Figure 2). Twenty-eight percent (n=63) of early childhood teacher

Figure 2. Number of Bachelor's Degree Early Childhood Teacher Training Programs with Required Embedded Diversity Courses

*(N=224; Mean* = 6 semester hours, *Range* 0 to 39)




education programs require none to 2 semester hours of embedded diversity course work, and an additional 23 % (n=52) require 3 to 5 semester hours. Twenty percent (n=45) require 6 to 8 semester hours, 9 % (n=19) require 9 to11 semester hours, 7 % (n=15) require12 to 14 semester hours, and 14 % (n=30) require 15 to 39 semester hours.

Bachelor's degree teacher preparation programs, on average, require 8.37 semester hours of combined explicit and embedded diversity courses for undergraduate students (see Table 1). This course work represents only 12.5 % of the 67 average semester hours of professional course work required by programs.

Table 1. Bachelor's Degree Early Childhood Teacher Preparation Programs' Requirements: Mean and Percentage of *Explicit* and *Embedded* Semester Hours

*N=224*

| | Total Explicit Diversity Semester | Total Embedded Diversity Semester | Total Diversity Semester | Required Professional Education |
|---|---|---|---|---|

| | Hours | Hours | Hours | Semester Hour |
|---|---|---|---|---|
| Mean | 2.08 | 6.29 | 8.37 | 67 |
| Range | 0-20 | 0-39 | 0-39 | 12-120 |
| Percent | 3.1% | 9.4% | 12.5% | 100% |

We further examined diversity content in required courses by comparing special education courses and courses that address other categories of diversity. The importance of this analysis developed as we examined course requirements that indicated children with special needs might be more frequently mentioned than other groups of children (e.g., second language learners, low-income children). In part, this impression, if true, might be due to national legislation (e.g., Public Law 94.142 [1975]; Education of the Handicapped Act [1983]) and state initiatives that have attempted to secure educational equity for students with special needs. In response to governmental policies early childhood teacher preparation programs require course work that specifically addresses the education of children with special needs. With the exception of second language learners (e.g., Bilingual Education Act), there appears to be a dearth of specific federal or state education policies and legislation that has mandated educational responses (e.g., professional training or course requirements) that address areas such as culture, social class, ethnicity and race.

The majority of teacher education programs in our sample (224 of 226) have professional course requirements that in title and/or course description address the education and development of special needs children. We examined two types of courses that referenced children's characteristics (e.g., ethnicity, immigrant status) of interest to this study: 1) those that in terms of their title and/or course description *primarily or only* address special needs; and 2) courses that through their title and/or course description primarily address other areas of

diversity content (e.g., language) and may include special needs in course content. We refer to the former as 'primarily special education' courses and the latter as 'all diversity category' courses (see Table 2). What is important to remember in this comparison is that course

Table 2. Bachelor's Degree Early Childhood Professional Requirements: Mean and Percentage of Semester Hours of Primarily Special Education and All Diversity Category Courses

*N=224*

| | Average Semester Hours of Courses that Address: | | Required Professional Education Semester Hour |
|---|---|---|---|
| | Primarily Special Education | All Diversity Categories | |
| Mean | 8.62 | 8.37 | 67 |
| Range | 0-43 | 0-39 | 12-120 |
| Percent | 12.9% | 12.5% | 100% |

descriptions and titles suggest that 'primarily special education' courses may be more likely to be addressed in the course whereas 'all diversity category courses' are more likely to address a range of differences (e.g., culture, social class).

Table 2 indicates that on average early childhood teacher education programs appear to require slightly more semester hours of courses that address special needs (*Mean* 8.62, *Range* 0-43) than courses that address all diversity categories (*Mean* 8.37, *Range* 0-39). The former constitute almost 13 % and the latter 12.5 % of all professional course requirements.

*Q2. Which of 11 diversity categories (e.g., race, language) appear in early childhood professional education course descriptions and to what extent do particular diversity categories (e.g., special needs) appear relative to other categories?*

Diversity categories were found in 223 institution's course descriptions. Three institutions do not have any terms, language or content in their course descriptions that indicated attention to children's characteristics (such as race, culture, language). A total of 2,092 terms and phrases that reference our diversity categories appear in explicit and embedded course descriptions. Table 3 presents the ranking of diversity content from most to least frequently found categories. Special needs language is the most frequent category in course descriptions (n=783), followed by culture (n=495), diversity (n=208), language (n=114), learner categories (n=119), ethnicity (n=82), and social class (n=72). In comparison, fewer references were made to race (n=50), all children (n=29), minorities (n=11), and immigrant status (n=4).

*Q3. Which of 11 diversity content categories appear in the program descriptions?*

Ninety-six percent of 226 institutions have program reviews that we evaluated for diversity content. Program reviews are descriptions of the teacher-training program's mission and goals vis-à-vis students. Of 216 institutions with program reviews, 22 % (n=47) have no language, terms or phrases that referenced children's characteristics (e.g., race, social class) of interest to this study. A total of 169 institutions (78 percent) with diversity content in program reviews have 461 examples of diversity content (see Table 3). We ranked the frequency of diversity content in course descriptions and program reviews. Although ranked somewhat differently both have the same five diversity categories in the top six—special needs, culture, diversity, learner characteristics, special needs and ethnicity. Only all children and language are not ranked similarly in course and program descriptions.

Table 3. Rank Order of Diversity Content Categories In Course Descriptions and Program Reviews for Entire Sample

| | Course Descriptions *N=223* | | Program Review *N=169* | |
|---|---|---|---|---|
| Rank | | Number | | Number |
| 1 | Special needs | 783 | Culture | 90 |
| 2 | Culture | 495 | Diversity | 77 |
| 3 | Diversity | 208 | Learner characteristics | 48 |
| 4 | Language | 144 | All children | 44 |
| 5 | Learner characteristics | 119 | Special needs | 27 |
| 6 | Ethnicity | 82 | Ethnicity | 26 |
| 7 | Social class | 72 | Race | 23 |
| 8 | Race | 50 | Social class | 21 |
| 9 | All children | 29 | Language | 15 |
| 10 | Minorities | 11 | Immigration status | 5 |
| 11 | Immigration status | 4 | Minorities | 4 |
| | Other: e.g., anti-bias | 97 | Other: e.g., anti-bias | 81 |
| Total | | 2,092 | | 461 |

*Q4. How many bachelor's degree teacher preparation programs require student internships in settings defined by the program as 'diverse', 'multicultural' or including children of color, second language learners, children from many cultures and ethnicities, and immigrant, poor and special needs children?*

Ninety-three percent of programs preparing early childhood teachers do not require a student teaching experience in a setting they describe as 'diverse', 'multicultural' or in some other way that suggests the program expects the student teacher will gain experience with children of color, second language learners, children from many cultures and ethnicities, and immigrant, poor and special needs children. Only 7 % of programs indicate such expectations in their on-line documents (see Table 4).

*Q5. How many bachelor's degree teacher preparation programs have a foreign language general education requirement?*

Twenty-nine percent of programs (n=66) have a general education foreign language requirement (see Table 4).

Table 4. Internship and Foreign Language Requirements in Bachelor's-Degree Early Childhood Teacher Education Programs

*N=226*

| | Professional Education Requirement: Internship in a 'Diverse' Setting | | General Education Requirement: Foreign Language | |
|---|---|---|---|---|
| | *Number* | *%* | *Number* | *%* |
| Yes | 16 | 7 | 66 | 29 |
| No | 210 | 93 | 160 | 71 |

*Q6. Do bachelor's-degree teacher preparation programs with and without National Council for Accreditation of Teacher Education (NCATE) accreditation differ in the number of semester hours of diversity content course work; diversity content categories in program reviews and course descriptions; the requirement of student internship in a 'diverse' setting; and a foreign language general education requirement?*

NCATE accreditation requires college and university teacher education preparation programs "commit to preparing teachers for a diverse community of students" (NCATE, 2002, p. 4). Because of its influence in teacher preparation and its emphasis on preparing teachers for 'diverse' children we examined whether NCATE accredited programs differed from non-NCATE accredited programs, in terms of explicit and embedded diversity course requirements, required student teaching in a setting the program defines as 'diverse', required foreign language, diversity content in course descriptions, and diversity content in program descriptions. Sixty-seven percent (n=151) of the teacher training programs in the present study were accredited by NCATE, and 33 % (n=33) were accredited by other accreditation entities (see Table 5).

NCATE and non-NCATE accredited bachelor's degree teacher education programs do not differ substantially in the average number of semester hours of explicit and embedded courses. A slightly larger percentage of non-NCATE accredited programs (5 percent) in comparison to NCATE programs (3 percent) require an internship in a setting the program

defines as 'diverse'. Also, 36 % of non-NCATE programs compared to 25 % of NCATE accredited programs require a foreign language in general education requirements.

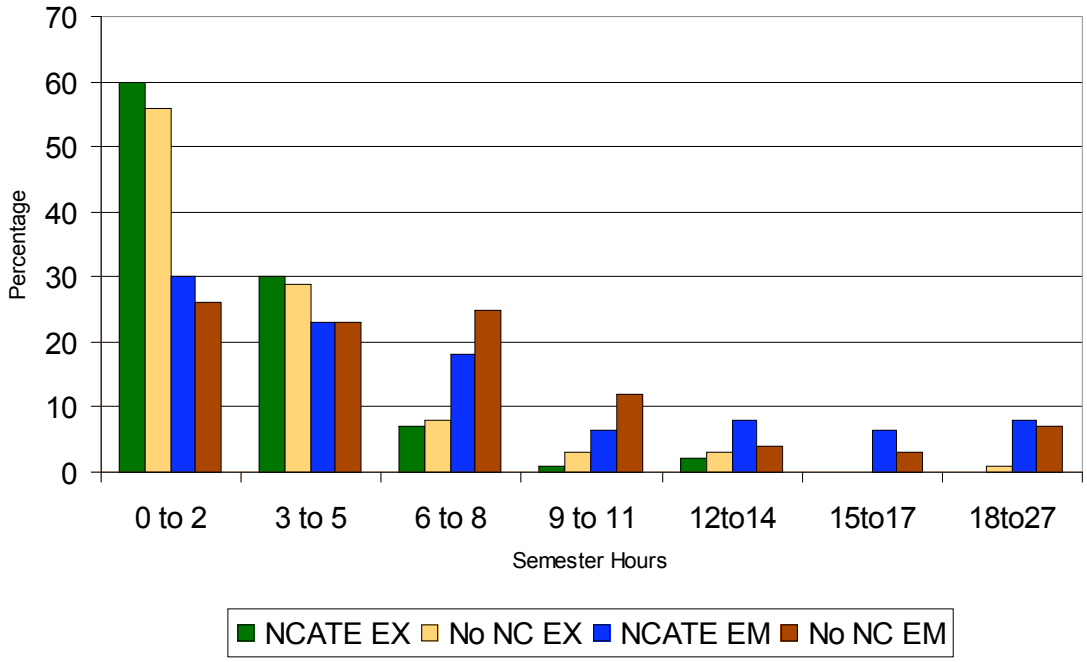
Table 5. Diversity Requirements in NCATE and Non-NCATE Accredited Teacher Preparation Institutions

| Type of Accreditation | *N* (%) | Mean Semester Hours *(Range)* | | Number & (%) of Programs that Require: | |
|---|---|---|---|---|---|
| | | Explicit Diversity Courses | Embedded Diversity Courses | Diversity Internship | Foreign Language |
| NCATE | 151 (67%) | 2 *(0-12)* | 6 *(0-27)* | 4 (3%) | 34 (25%) |
| Non NCATE | 75 (33%) | 2 *(0-20)* | 6 *(0-39)* | 4 (5%) | 25 (36%) |

A comparison of the percentage of explicit and embedded diversity content semester hours in NCATE accredited and non-NCATE accredited programs is represented in Figure 3. A greater percentage of NCATE accredited programs (90 percent) than non-NCATE accredited programs (85 percent) require 0 to 5 semester hours of explicit diversity coursework. In contrast, less than10 % of both types of schools require 6 to 27 semester hours of explicit course work, the percentage of non-NCATE schools exceeds that of NCATE schools in all categories.

Figure 3. Percentage of NCATE and Non-NCATE Accredited Institutions with Explicit (EX) and Embedded (EM) Semester Hours

(NCATE *N=151*; Non-NCATE *N=75*)




In relation to embedded course work the pattern is more varied (see Figure 3). Thirty percent of NCATE accredited programs compared to 26 % of non-NCATE accredited programs require 0 to 2 semester hours of embedded coursework. Twenty-three percent of both program types require 3 to 5 semester hours of embedded diversity course work. A smaller percentage of NCATE (18 percent) in comparison to non-NCATE (25 percent) institutions require 6 to 8 semester hours, and this pattern is repeated in comparing 9 to 11 semester hours (7 to 12 % respectively). But, the advantage shifts back to NCATE institutions in comparing the final categories of semester hours. A greater percentage of NCATE schools in comparison to non-NCATE schools, albeit no greater than 9 percent, require from 12 to 27 semester hours.

We ranked the diversity content categories by the frequency of their appearance in both course descriptions and program descriptions of NCATE and non-NCATE accredited programs (see Table 6). There appear to be no substantive differences in the rank of diversity content between the two types of accredited programs. In course descriptions the two most frequently

used diversity categories (i.e., special needs and culture) and the sixth through eleventh categories (i.e., race, ethnicity, social class, all children, minorities, and immigration status) share the same rank. With some variation between NCATE and non-NCATE accredited programs three diversity categories namely, diversity, learner characteristics, and language are ranked either third, fourth or fifth. The diversity categories in program reviews of NCATE accredited and non-NCATE accredited institutions are similar—culture, diversity, learner characteristics, and all children are in the most frequently used terms. The next group of categories (e.g., special needs, race, ethnicity, and social class) shares the same relative ranking in terms of their frequency in text analyzed. Language, immigration status, and minorities are the least frequently used diversity categories by both types of institutions. In summary, on dimensions measured in this analysis NCATE and non-NCATE accredited schools do not appear to differ substantially in terms of degree requirements and content that addresses the developmental and educational needs of children who have special needs, children of color, and children who are low-income, immigrants, second language learners and second dialect speakers.

Table 6. Rank Order of Diversity Categories in Course and Program Descriptions of NCATE and Non-NCATE Bachelor's Degree Institutions

| | *N = 151* | | *N = 75* | |
|---|---|---|---|---|
| | NCATE Course Descriptions | | Non-NCATE Course Descriptions | |
| Rank | | Number | | Number |
| 1 | Special needs | 516 | Special needs | 267 |
| 2 | Culture | 318 | Culture | 177 |
| 3 | Diversity | 163 | Language | 67 |
| 4 | Learner Characteristics | 79 | Diversity | 45 |
| 5 | Language | 77 | Learner characteristics | 40 |
| 6 | Ethnicity | 55 | Ethnicity | 27 |
| 7 | Social Class | 51 | Social Class | 21 |
| 8 | Race | 30 | Race | 20 |
| 9 | All Children | 21 | All children | 8 |
| 10 | Minorities | 8 | Minorities | 3 |
| 11 | Immigration Status | 4 | Immigration status | 0 |
| | Other: anti-bias, etc. | 60 | Other: anti-bias, etc. | 37 |
| Total | | 1383 | | 709 |
| | NCATE Program Descriptions | | Non-NCATE Program Descriptions | |
| Rank | | Number | | Number |
| 1 | Culture | 61 | Culture | 29 |
| 2 | Diversity | 55 | Diversity | 21 |
| 3 | Learner Characteristics | 34 | Learner characteristics & All children | 14 |
| 4 | All Children | 30 | Ethnicity & Social Class | 9 |
| 5 | Special needs | 19 | Race & Special needs | 8 |
| 6 | Ethnicity | 17 | Language | 4 |
| 7 | Race | 15 | Immigration status & Minorities | 1 |
| 8 | Social Class | 12 | | |
| 9 | Language | 11 | | |
| 10 | Immigration Status | 4 | | |
| 11 | Minorities | 3 | | |
| | Other: anti-bias, etc. | 58 | Other: anti-bias, etc. | 23 |
| Total | | 320 | | 141 |

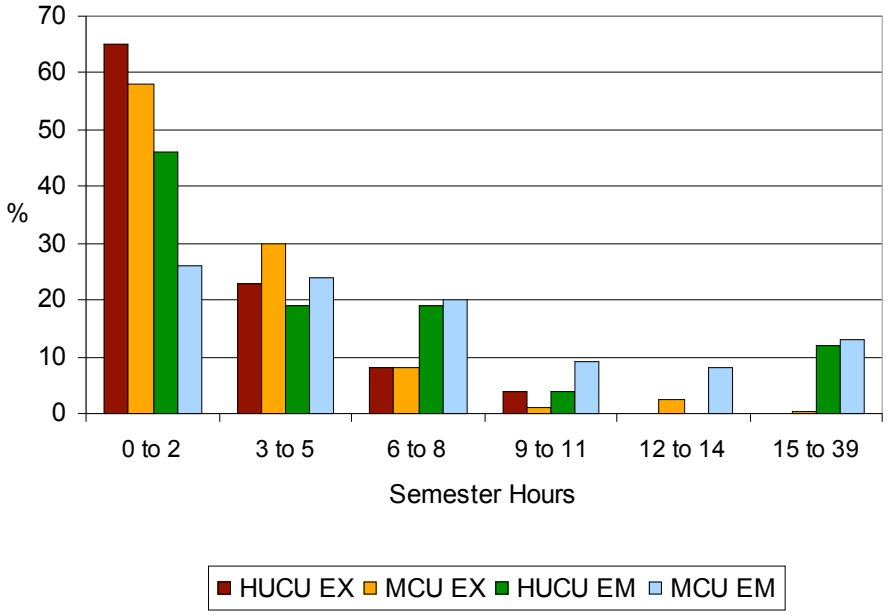
*Q7. Do bachelor's degree teacher preparation programs that have educated historically underserved populations (e.g., African Americans, Latinos/-as, Native Americans, and the Deaf), differ substantially from 'majority' institutions in the number of semester hours of diversity content course work; diversity categories in program reviews and course descriptions; the requirement of student internship in a 'diverse' setting; and a foreign language general education requirement?*

We examined the early childhood teacher preparation requirements in 26 CUUP institutions: historically Black colleges and universities (n=23); one university serving Latina/o students; one university serving Native American students; and one institution serving Deaf students. Because of their distinct history and commitment to educate students from underserved populations we wanted to determine what CUUP institutions required in terms of preparation of teachers to work effectively with children who have special needs, children of color, and children who are low-income, immigrants, second language learners and second dialect speakers, and if they differed from 200 colleges and universities we designated as 'majority' (MCU) in this regard. On average CUUP bachelor's degree teacher preparation programs require 6 semester hours of diversity content course work, a combination of explicit and embedded courses, compared to 8 semester hours for MCU. This course work represents only 9 % of 68 average professional course requirements in CUUP institutions compared to 12 % in MCU programs.

The embedded and explicit diversity course requirements of CUUP and MCU institutions are compared in Figure 4, which indicates that a greater percentage of CUUP (65 percent) in comparison to MCU institutions (58 percent) require a minimum number (0-2 semester hours) of explicit diversity course work. The same pattern is true for 0-2 embedded diversity semester hours—46 % of CUUP versus 24 % of MCU institutions. Fewer CUUP institutions require 3-5 semester hours (23 % explicit; 19 % embedded), compared to MCU institutions (30 % explicit; 24 % embedded). Remaining data suggest only slight differences between the two types of institutions.

Figure 4. Number Required Semester Hours of Explicit (EX) and Embedded EM) Diversity Courses in CUUP and MCU Bachelor's-Degree Early Childhood Teacher Training Programs

(CUUP *N =26* & MCU *N=200*)




*Which diversity categories appear in CUUP explicit and embedded professional education course descriptions? How do CUUP and MCU institutions compare on this dimension?* Course descriptions of 25 CUUP institutions contain diversity categories. One institution does not include any diversity content in course descriptions and is not included in this analysis. A total of 179 references to the 11 diversity categories appear in explicit and embedded course descriptions (see Table 7). Special needs is the most frequently found diversity content category (n=50), followed by culture (n=48), diversity (n=25), student learner characteristics (n=18), ethnicity (n=10), language (n=8), race (n=4), social class (n=3), and all children and immigrant status (n=1 each). In comparison, no references were made to minorities.

Similar patterns of diversity content categories were found in 24 CUUP and 198 MCU course descriptions (see Table 7). Two MCU and CUUP institutions do not have course

descriptions. Special needs, culture, and diversity are the most frequently referenced diversity content categories in course descriptions for both types of institutions. All other categories are ranked in close proximity to one another.

Table 7. Rank Order of Diversity Categories In CUUP and MCU Course Descriptions and Program Review

| | CUUP Course Descriptions *N=24* | | MCU Course Descriptions *N=198* | |
|---|---|---|---|---|
| Rank | | Number | | Number |
| 1 | Special needs | 50 | Special needs | 733 |
| 2 | Culture | 48 | Culture | 447 |
| 3 | Diversity | 25 | Diversity | 183 |
| 4 | Learner Characteristics | 18 | Language | 136 |
| 5 | Ethnicity | 10 | Learner characteristics | 101 |
| 6 | Language | 8 | Ethnicity | 72 |
| 7 | Race | 4 | Social Class | 69 |
| 8 | Social Class | 3 | Race | 46 |
| 9 | All Children | 1 | All children | 28 |
| 10 | Immigration Status | 1 | Minorities | 11 |
| 11 | Minorities | 0 | Immigration status | 3 |
| | Other: anti-bias, etc. | 11 | Other: anti-bias, etc. | 86 |
| Total | | 179 | | 1915 |
| | CUUP Program Reviews *N=24* | | MCU Program Reviews *N=192* | |
| 1 | Culture | 15 | Culture | 74 |
| 2 | Race & All children | 8 | Diversity | 70 |
| 3 | Diversity & Ethnicity | 7 | Learner Characteristics | 42 |
| 4 | Learner Characteristics | 6 | All children | 35 |
| 5 | Language & Social Class & Immigration status | 2 | Special Needs | 26 |
| 6 | Minorities & Special Needs | 1 | Ethnicity & Social Class | 19 |
| 7 | | | Race | 15 |
| 8 | | | Language | 13 |
| 9 | | | Immigrant Status & Minorities | 2 |
| 10 | Other | 16 | Other | 64 |
| | Total | 75 | | 381 |

Which diversity categories appear program descriptions of CUUP? How do CUUP and MCU institutions compare on this dimension? Twenty-four of 26 CUUP institutions have program reviews that were evaluated for diversity content. CUUP program reviews contained 75 examples of references to 11 diversity categories. Table 7 indicates that the diversity categories most commonly referred to are, culture, race, all children, ethnicity and diversity; and only 1 or 2 refer to language, social class, immigrant status, minorities, and special needs.

A comparison of program reviews of CUUP and MCU institutions suggests that both types of institutions are most likely to refer to culture, diversity, all children and learner characteristics. CUUP institutions are more likely to refer to race—ranked second for CUUP institutions in comparison to seventh for MCU programs. Language, social class, immigration status, minorities and special needs are rarely referred to in CUUP and MCU program reviews.

*Do CUUP bachelor's-degree early childhood teacher education programs require a student internship in a ' diverse' setting, and a foreign language as part of general education requirement for early childhood students? How do CUUP and MCU institutions compare on these dimensions?* Although the percentage of both types of institutions in small CUUP teacher education programs (12 percent) are more likely than MCU institutions (7 percent) to require a student teaching experience in a 'diverse' setting (Table 8). But, a slightly larger percentage of MCU institutions (29 percent) than CUUP institutions (27 percent) require a general education foreign language requirement.

Table 8. CUUP and MCU Early Childhood Program
Diversity Internship and Foreign Language Requirements

| | Professional Education Requirement: Internship in a 'diverse' Setting | | | | General Education Requirement: Foreign Language | | | |
|---|---|---|---|---|---|---|---|---|
| | CUUP | | MCU | | CUUP | | MCU | |
| | *N=26* | | *N=200* | | *N=26* | | *N=200* | |
| | *Number* | % | *Number* | % | *Number* | % | *Number* | % |
| Yes | 3 | 12 | 16 | 7 | 7 | 27 | 59 | 29 |
| No | 23 | 88 | 210 | 93 | 19 | 73 | 141 | 71 |

## SUMMARY OF FINDINGS

- On average, bachelor's-degree early childhood teacher preparation programs require:
    - 8.62 semester hours of coursework that primarily or only addresses special education (this is 12.8% of professional education requirements); and
    - 8.37 semester hours of diversity course work which includes 11 diversity categories (this is 12.5% of professional education required hours).

- The most commonly referred to diversity content categories in early childhood teacher preparation programs' course descriptions and program reviews are *special needs, culture, diversity, language, and learner characteristics.*

- The least frequently referred to diversity content categories in early childhood teacher preparation programs course descriptions and program reviews *are minorities, immigration status, race,* and *social class.*

- 7% of early childhood teacher preparation programs require a student internship in a setting they describe as 'diverse', 'multicultural' or in some other way that suggests the program expects the student teacher will gain experience with children of color, second language learners, children from many cultures and ethnicities, and immigrant, poor and special needs children.

- 29% of early childhood teacher preparation programs have a general education foreign language requirement.

- NCATE and non-NCATE accredited early childhood teacher preparation programs do not differ substantially in terms of semester hours of courses that reference diversity content categories; requirement of an internship in a 'diverse' setting; and frequency of use of diversity content in course descriptions and program reviews.

- Colleges and universities historically dedicated to the education of underserved populations (CUUP) require on average 2 fewer semester hours of courses that reference diversity content categories than do majority or MCU early childhood teacher preparation programs; but a greater percentage of CUUP institutions (12%) require a student internship in a 'diverse' setting than do MCUs (7%); while slightly more MCUs (29%) than CUUPs (27%) require a foreign language.

## DISCUSSION

This study examines the degree to which undergraduate early childhood teacher education program requirements indicate teachers are to master knowledge and practice skills related to the educational and developmental needs of *all* children. Ample evidence was found that a national sample of teacher preparation institutions recognize that teacher competence includes the ability to effectively teach children who represent the complexity of cultures, languages, abilities, races, and ethnicities present in early childhood classrooms. Although the study did not determine exactly how long the developmental and educational needs of these children have been mentioned in undergraduate coursework, certainly major efforts to address this issue have come largely in the last 50 years. Three factors contribute to this interest in the United States: movements by disenfranchised groups for social change and equity influenced beliefs, attitudes, and behaviors regarding their rights; world wide competition for educational leadership awakened concerns about the quality of the nation's schools and educational achievement of all children; and immigration and demographic changes emphasized the importance of teaching children from different cultural and linguistic backgrounds.

Despite the obvious interest of teacher education programs in the developmental and educational needs of children of color, second language/dialect speakers, and others the findings suggest that *few hours of coursework and little practice is devoted to teaching early childhood teachers how to be effective educators of them, and work with their families and communities.* This study found on average only 25 % of required semester hours of professional course work

addresses the educational and development needs of children who are low-income, of color, have special needs, second language/dialect speakers, and others. This suggests that perhaps 75% of the professional curriculum in bachelor's degree teacher education programs is primarily concerned with the development and education of White middle class, able bodied, monolingual children. In addition, there is enormous variation in the degree to which teacher education programs consider the developmental and educational needs of some children and not others. For example, young children with any of the characteristics investigated (e.g., race, social class, language, ethnicity, culture, special needs, and immigrants) are the focus of instruction in a small percentage (12% of semester hours) of required course work. Children with special needs appear to be the subject of slightly more required course work (13% of semester hours) than do children with all other characteristics examined (e.g., race, social class, culture, language, ethnicity, immigrants). Further, race, immigrant status, ethnicity and social class are referred to less frequently. And some diversity categories examined in this study that are traditionally related to social stratification and discrimination, such as gender and sexual orientation, almost never appear in teacher education requirements, while, other language (e.g., learner characteristics) does not specifically refer to groups historically subject to discrimination.

These differences in reference to children's characteristics beg the questions: Why are some groups mentioned by name and others not? Why are various terms used or avoided? It may be that the specificity of the legal mandate for services to children with special needs (P. L. 94-142) accounts for the frequency with which they are explicitly mentioned. It is also likely that avoidance of other groups reflects the general discomfort in the United States in regard to racism and racial differences, use of foreign languages for public purposes, and class inequalities.

The absence of reference in college requirements to race is of particular concern. Only colleges and universities historically dedicated to the education of Black, Hispanic, Native American and Deaf students use the term "race" frequently in the documents examined. Given the long troubled history in America of educational discrimination based on race, language, national origin, and social class, the absence of references to children of these groups is remarkable. The reticence to directly refer to such disparities in education and to the groups associated with those disparities certainly needs to be challenged and overcome. The use of language that is vague (e.g., learner characteristics) makes compliance less likely and may encourage a general undervaluing of the legal mandate to address the educational needs of children from groups historically subject to discrimination. In addition, it may implicitly convey to teachers that avoidance of uncomfortable issues related to children, family and community characteristics, such as race, is *de facto* acceptable professional practice.

Rarely do teacher education programs require practice in classrooms in which children of color, poor children, second language/dialect speakers, and children with special needs are present. Seven percent of 226 programs state that they require students teach in settings in which they will work with children who represent the complexity of cultures, languages, abilities, races, and ethnicities present in U. S. early childhood classrooms. This suggests that early childhood teachers may not receive sufficient practice experience with children who represent the variation they may encounter in their professional careers. In addition, the type of accreditation the undergraduate teacher education program has (NCATE vs. non-NCATE), and whether programs have a history of serving African American, Latina/o, Native American, or the Deaf does not appear to substantially influence the attention programs give to the developmental and

educational needs of children (e.g., special needs, children of color) present in early childhood classrooms.

A premise of this study is that, prospective teachers receive a powerful message about the relative importance of so-called 'diverse' children's (e.g., poor children, children of color) education through teacher education program requirements—especially courses and student teaching. For example, the degree to which programs place the development and education of *all* children or only *some* children at the center of the student teacher's education has consequences, both for the student's competence as an educator and perceptions of whose education really matters. We recognize that simply being at the center of teaching is necessary but not sufficient—the quality of what is taught about children of color, second language/dialect speakers, poor children and others—is critically important, but beyond the scope of the present study. Further, we suggest that through instructional curricula, practices, and pedagogy early childhood teacher education programs may privilege the developmental and educational needs of some groups of children over others thereby reproducing inequality (Gay, 1986; Giroux, 1996; Irvine, 2003; Ladson-Billings, 1995; Ray, 2000). The results suggest that early childhood teacher education programs convey an unambiguous message to future teachers—professional competence requires weak and uneven knowledge and practice skills in educating children who have special needs, children of color, children who are low-income, immigrants, second language/dialect speakers, and children from many cultural and ethnic groups. The developmental and educational needs of *all* children simply *do not* appear to be at the center of teacher preparation coursework and practice. In light of these results it is not surprising that teachers report their professional training has not prepared them for all the children they educate

(Association for Children on New Jersey's Early Learning Initiative, 2005; Kearney & Durand, 1992; Ray & Bowman, 2003).

What are the implications of these findings for the preparation of *all* teachers who can effectively educate *all* children and work successfully with *all* families and communities represented in U. S. early childhood classrooms (Pre-K-early elementary grades)? What needs to be done to significantly improve early childhood teacher preparation that is responsive to the tremendous complexity of children and families, teachers will encounter in their classrooms? How can early childhood teacher preparation programs contribute meaningfully to significantly improved outcomes for groups that have persistently not succeeded in U. S. schools?

In order to achieve the goal of educational success for *all* children we argue for three significant changes in early childhood teacher preparation, namely what is taught (pedagogy), who teachers (faculty), and who is being taught (students). We stress the need for significant reforms that need to be initiated and developed within teacher education institutions, and should act as models for best practice in early childhood teacher preparation. These three changes, if fully addressed, will make a significant contribution to improving early childhood teacher preparation for all children and families. They are:

1. Conceptualize a comprehensive pedagogy that fully integrates developmental theory with knowledge of all groups and types of children, families and communities.

2. Transform the faculty in teacher preparation institutions through deepening faculty expertise and instructional practices (e.g., knowledge regarding the developmental and educational needs of Mexican immigrant children); faculty disposition (e.g., willingness to challenge hegemony of Euro-centric models of child development); and faculty commitment to provide clinical and practice experiences for student teachers with children of color, second language learners, low-income children and children with special needs.

3. Recruit and retain new leaders—develop and articulate a workforce agenda and career ladder that assures diversity, quality, and connects child success to high quality early experiences.

We recognize that the proposed changes require re-conceptualizing and reformulating the knowledge base, practice experiences and dispositional capacities required of future early childhood teachers. This in turn necessitates changes in institutions of higher education, specifically in program requirements, pedagogy, and in faculty capacities. The implementation of these changes will not be easy, but we are certain that they are essential if early childhood teachers are to be effectively prepared to assure the optimal development and educational achievement of *all* children. Significant barriers will need to be surmounted to achieve these goals, specifically influencing systems, organizations, institutions and individuals that shape early childhood teacher education, e.g., state boards of higher education, professional accreditation organizations, and professional organizations of teacher educators (see Ray et al., 2006). For example, both institutional and professional accreditation bodies (e.g., NCATE, NAEYC) must exert their considerable influence through the development of teacher standards that consistently and specifically address the developmental and educational needs of *all* children. But our primary recommendations address immediate changes in pedagogy, instruction and practice experiences of early childhood teachers—changes that are shaped in large part by higher education faculty.

Constraints that may influence change within institutions of higher education may include *institutional capacities* (e.g., funding; capacity to change); *capacities within the faculty* (e.g., availability of faculty or consultants with sufficient expertise regarding the development and education of children of color, second language learners and dialect speakers; reluctance to acknowledge and alter the privileging of Euro-centric views of child development; failure to gain departmental or institutional support; commitment of time and energy); and *market constraints* (e.g., if program requirements are increased to adequately address the educational needs of all

students will teacher education programs become too expensive for many students and will alternative certification programs become more attractive). One obvious tension exists between our assertion that teachers need more specialized knowledge of children's developmental and educational needs (e.g., second language learning, cultural background), 67 average credit hours of course work required in most programs, and the reported (Bowman et al., 2001) insufficiency of domain specific knowledge and practice with diverse students of early childhood teachers. If deeper knowledge of the development and educational needs of second language learners, children of color and children with special needs is to be incorporated into teacher education how should that be done? What is the necessary knowledge base for early childhood teachers who are competent to teach all children? For example, given that English as a Second Language and special education have been discrete areas of educational expertise, how can they be incorporated into early childhood education without making program requirements onerous? How should practice experiences be conceptualized to assure sufficient quality experience for student teachers? Do the number of credit hours need to be increased? How should induction supports during the first two years of in-service teaching contribute to the development of teachers' expertise in working with all children?

## PEDAGOGICAL CHANGE

Creating pedagogical change in teacher education programs involves initially the development of a rationale and the conceptualization of pedagogy for all children.

*Rationale.* With the 1954 U. S. Supreme Court decision *Brown v. Board of Education*, the passage in 1966 of Head Start legislation and special education legislation (P.L. 94.142) in 1975, the nation's effort to provide an equal education for particular groups of children was firmly established. Federal and state statutes and case law obligated schools to focus on the

education of children from groups historically denied equal access to the resources and instruction necessary for scholastic achievement. All states have standards in their teacher education review process that explicitly refer to the obligation to address diversity in their programs (see Ray et al., 2006). As a consequence, all bachelor's degree granting colleges and universities have some reference to diversity in their requirements for teachers.

Implicit in legislation, judicial opinion, and state standards is the principle that education should be tailored to meet the needs of specific populations. Acceptance of this principle suggests that teacher preparation programs develop statements or rationales that detail why the developmental and educational needs of children who have special needs, children of color, children who are low-income, immigrants, second language/dialect speakers, and children from cultural and ethnic groups should be of concern to teachers. This rationale should form the foundation of an institution's evaluation of its pedagogy, instruction, and curriculum. The rationale should present the program's understanding of: the developmental and educational needs of children who have special needs, children of color, children who are low-income, immigrants, second language/dialect speakers, and children from cultural and ethnic groups; the educational implications of their needs for teaching and learning; the connection between their needs, education, social justice and equity; and how the unique obligations of educators to specific groups of children are defined within the program. The rationale should make clear that specialized knowledge and practice skills needed for teaching children with characteristics, such as special needs, English as a second language, poverty and others.

*Comprehensive interdisciplinary pedagogy.* A comprehensive interdisciplinary pedagogy that integrates practice, research and developmental theory with knowledge of children with special needs, children of color, low-income children, immigrant children, second

language/dialect speakers, and children from cultural and ethnic groups is essential. What do teachers who are effective educators for all children know, what can they do, and how do we know they do it? Our study suggests that typically early childhood teachers receive fragmented and inconsistent knowledge of and few practice experiences with children who represent the complexity of cultures, languages, abilities, races, and ethnicities they will encounter in their professional careers. Hence, significantly improving knowledge, practice experiences, and assessment of student competence in undergraduate programs is required.

*Knowledge*. Early childhood teachers need knowledge based on a conceptual model of development that includes all children and families. There are many challenges to the creation of a comprehensive development model for all children, including: prominent theoretical orientations in early childhood reflect normative development of White American, middle class, monolingual, able-bodied children, and may inadequately explain development of children growing up in other contexts and cultural communities; may not sufficiently consider contextual influences (e.g., family members, community networks, social stratification) beyond child-caregiver dyads (Garcia Coll, et al., 1996; Hyson, 1996; Weber, 1984); conceptual, ideological, and methodological problems characterize research on children of color and low-income children (Garcia Coll, et al., 1996; Irvine, 1990; Murrell, 2002; Garcia, 2005); and a dearth of research on young children with special needs from many ethnic, racial, cultural and social class backgrounds.

Despite these problems it is critical to conceptualize an enlightened view of child development that helps teachers understand children and families different from themselves. Increasingly, child development and early education researchers and practitioners recognize that we must do the hard work to define child development in context based on what we know and

believe works well for children with different characteristics, backgrounds and abilities. Considerable research describes how cultural processes and practices (e.g., childrearing, parenting, models of child competence, language) shape child development, and increasingly is being incorporated into early childhood teacher preparation. Theoretical frameworks (e.g., Ka□itçiba□i, 1996; Gaskins, Miller, & Corsaro, 1992; Miller & Goodnow, 1995; Nsamenang, 1992; Rogoff, 2004) gaining ground view child development from ecological and cultural perspectives. These perspectives tend to stress the influence of external factors (e.g., relationships with multiple caregivers, interaction effects between multiple contexts) rather than internal processes such as cognition, and the role of children's participation in cultural practices as shaping knowledge, identity, and competencies. Further, because these perspectives consider interactive effects between settings in which U. S. children spend the majority of their time (e.g., school and family) they may help prospective teachers gain a deeper understanding of differing situational and contextual factors in children's everyday lives.

In order to more fully understand children's development it is essential for faculty in teacher preparation programs to draw on two types of expertise. The first includes traditional academic knowledge—deep understanding of research and practice in critical areas of child development (e.g., language, social-emotional), childrearing, and early education; and enlightened non-deficit perspectives on development. And, a second type of expertise derived from practice and experience with children and families of color, immigrants, various cultural traditions, the poor, and others, that offers perspectives on child development that may contradict traditional early childhood orthodoxies (e.g., age at which young children are competent to do certain tasks; care giving; disciplinary strategies; gender roles).

Throughout this paper we have asserted that the developmental and educational needs of children with seven characteristics—race, ethnicity, culture, language, immigrant status, special needs and social class—need to be placed at the center of early childhood teacher preparation; that their developmental and educational needs must be defined and understood from cultural and ecological perspectives; and that research suggests that teachers need specialized knowledge to contribute to positive educational outcomes. A new conceptualization of pedagogy should identify these areas of specialized knowledge competent teachers need to have for children with these characteristics (e.g., culture) *and* multiple characteristics (e.g., culture, social class, language). An example may be helpful.

When we consider the developmental and educational needs of native-born, able-bodied, young African American children who may include both mono-African American Vernacular English speakers and AAVE-School English speakers what competencies must teachers have? What do teacher education programs need to include in a newly conceptualized pedagogy that places the developmental and educational interests of these children and their families and communities at the heart of teacher development? We believe that teachers of African American children need to demonstrate competence in a minimum of 7 areas: culture; language and communication; instructional practices; teacher, school, family and community relations; assessment; professional growth and development; and reflective assessment of practice. We offer the following as an example to stimulate thought and discussion regarding teacher competence to address African American children's developmental and educational needs, and ultimately the needs of all children.

1. Culture

Teacher competence includes understanding theories regarding human development as a cultural process and their application to all children and specifically African American children and their families and communities; knowledge of African American childrearing beliefs, values, traditions and practices; and recognition of cultural variability within and among African Americans individuals, families and communities. Competent teachers recognize that young African American children, as a group and as individuals, come to school already shaped by participation in family and community systems that include social roles, models of child competence, social networks, meaning systems, and cultural practices. Teachers understand the interconnection between African American, American culture and issues of identity. Teachers have knowledge of African American history and heritage and how these experiences influence successful educational outcomes. Teachers express and behave in ways that demonstrate respect for children and families' culture. Teachers use their interactions with children, families and community members to learn about African American cultural values, beliefs, traditions and mores. Teachers incorporate African American culture into teaching and learning throughout the

curriculum and the classroom. Teachers understand general principals of the interaction of culture and social class in African American families and communities including how stress due to poverty may influence parenting, child development and learning.

2. Language and Communication

Competent teachers understand theories of language acquisition, linguistics, language in context, and the role of language in teaching and learning. Teachers recognize language usage variability (e.g., 'standard' English and African American Vernacular English [AAVE]) within African American communities. Teachers understand theories of dialect acquisition and formation; the history of AAVE; the implication of AAVE for teaching and learning; instructional strategies and techniques for helping children move from AAVE to 'academic English' and from 'academic English' to AAVE. Teachers use culturally relevant materials to engage children in language and communication activities. Teachers use multiple strategies, materials and activities to incorporate children's language and communication styles into classroom instruction. Teachers recognize children and families' use of home language as linguistically valid. They understand the historical, social and political controversies surrounding AAVE usage in school settings. Competent teachers respect parent/family language preferences for their children.

3. Instructional Practices

Competent teachers believe all African American children can learn—no exceptions (Scheurich, 1998), and that it is the teacher's responsibility to assure children's educational success while in their care. Competent teachers—design instructional programs and activities based on—extensive knowledge of subject content, material, curricula, and resources; have the capacity to create, select, alter and adjust instruction and materials to meet children's developmental and educational needs; have knowledge of sequencing educational material; have knowledge of family and community values regarding teaching and learning; and have knowledge of each child in their classrooms. Competent teachers do not rely on a 'one-size fits all' approach to teaching African American children, or simplistic notions of relational or cognitive styles. Teachers recognize that group and classroom management issues may have their roots in pedagogical, curriculum and instructional issues, and can adjust accordingly. Teachers recognize each child's unique development, capacities, and challenges, and design instructional responses to support optimal outcomes. They encourage and support usage of African American children's home language and code switching in classroom instruction. Competent teachers support early literacy and math development by using a variety of educational strategies, materials, and activities that build on children's knowledge of their families, friends, communities and experiences. Competent teachers employ anti-bias strategies and activities in their classrooms. They create learning environments that encourage problem solving, collaborative learning, inquiry, and intellectual growth.

4. Teacher, school, family and community relations

Competent teachers are able to communicate effectively with African American parents/family members/guardians. They employ a variety of strategies to keep parents/family members/guardians informed. They create and maintain collaborative supportive relationships with parents/family members/guardians that engage them in setting expectations for educational outcomes. They recognize that working effectively with children, families, and communities from a culture different from their own means that they must listen, ask questions, and examine

their assumptions. Competent teachers employ effective problem-solving and negotiation strategies. Teachers participate in activities that support parents/family members/guardians involvement in school. They engage parents/family members/guardians in supporting and achieving developmental and educational goals for children. Competent teachers invite and encourage parent/family member/guardian participation in classroom and school activities as cultural and language resources.

5. Assessment

Competent teachers understand the relationship of assessment to teaching and learning; can use and critique a variety of assessment methods, procedures and tools; and use on-going assessment strategies (e.g., work samples, observation, tests) to inform everyday teaching and learning. Teachers understand cultural biases in present in existing assessment procedures and tools, and the misuse of assessment in African American education. Competent teachers are able to effectively communicate with colleagues and parents/family members/guardians information regarding assessment purposes and procedures conducted on their children.

6. Professional Growth and Development

Competent teachers demonstrate behavior that meets recognized professional standards of ethical practice, and are aware of culturally appropriate conceptions of honesty and fairness. Teachers engage in formal (e.g., meetings, conferences, courses) and informal professional development activities (e.g., self-directed reading) that expand their knowledge of culturally relevant and effective educational practices that contribute to optimal child outcomes. Teachers advocate for educational excellence, equity and social justice for African American children. Competent teachers share knowledge and information regarding their work with African American students and families with colleagues and others in respectful ways that maintain child and family confidentiality.

7. Reflective Assessment of Practice

Competent teachers understand their own culture's values, beliefs and practices, and recognize how they influence and impede their practice. They continuously evaluate their work with African American children through self-reflection alone and in partnership with colleagues, supervisors and others. Competent teachers seek out guidance and support from African American peers/colleagues regarding their practice. When conflicts arise with children, parents/families/guardians or peers teachers critically examine their own histories, cultural perspectives and biases; seek counsel; and work to build understanding and resolution.

In summary, this conceptualization of teacher competence for young native-born, able-bodied, African American children who may be both mono-African American Vernacular English/AAVE-School English speakers (which is not exhaustive) suggests that teacher educators will need to develop similar descriptions of what competent teachers need to know and do for each group of children defined by a characteristic (e.g., low-income) of interest in this

paper. We recognize that what we propose requires time and effort, both to develop and to employ within teacher education programs. The development of highly complex knowledge about all children, families, and communities cannot be conveyed if course content is 'dumbed down' or reduced to formulas that risk reinforcing stereotypes (e.g., in order to learn all African American children need highly structured instructional strategies). In addition, students in teacher education programs need experience with children, families and communities they will likely encounter in their professional careers.

Guided Clinical Experiences and Practice. The second critical area of teacher preparation involves guided clinical and practice experiences with children of color, poor children, second language/dialect speakers, immigrants, children with special needs, and children from cultural and ethnic communities. By guided clinical and practice experiences we mean activities (e.g., field experiences, volunteering, practicum, observations, immersion) organized and supervised by the faculty that for varying lengths of time place students in contact with individuals different in culture, race, class, language, ethnicity, national origin, and/or ability from themselves. Faculty guidance (e.g., advising, supervision, mentoring) or mentoring with competent field supervisors is critical in helping students connect theory to practice and examine affective responses.

We found that 93 percent of bachelor's degree programs did not appear to require student internships in diverse settings. As in all teaching, competence depends upon the knowledge and skills the teacher brings to the educational process, but, it also depends on teachers' dispositions, meaning systems, and ways of knowing regarding experiences with groups and individuals different from themselves. The emotional and social availability of young children makes them more responsive to educational intervention but also more vulnerable to mis-education.

Teachers' beliefs, values and behavior related to equity and diversity including subtle and overt biases and prejudices based on race, culture, ethnicity, national origin, language, special needs, gender, sexual orientation and social class must be a focus of professional development.

Given the complexity of practice skills and knowledge students need to gain to be effective teachers faculty need to consider changes in program requirements. For example, increasing time requirements for student clinical and teaching experiences; increasing the time teachers spend in teacher education programs (e.g., 4 versus 5-year programs); providing adequate advising; and developing field supervisory capacity to provide reflective supervision regarding children and families who are poor, of color and others, and reflective practice experiences in small groups for extended periods of time. Considering the limited time most students have to take education-related courses (roughly 2 years in a 4-year undergraduate degree program) teachers will have to gain much of their professional knowledge on the job which suggests that support for graduates (e.g., seminars, advising) should also be considered.

Assessment. The third critical area that early childhood teacher education programs need to develop is assessment of student competence to work effectively with children and families different from themselves. Assessment measures, processes and goals should be clear and understandable to students when they enter the program. It should be on-going, integrated in coursework, incorporate students' personal goals, and communicated to students on a regular basis. Clearly, assessment of this type requires coordination of faculty course instructors, placement advisers/supervisors, and students. Teacher educators need to define what constitutes competence in working with different groups of children. Constructs such as 'cultural competence', an often used but poorly defined construct (Dean, 2001) in practice literature, ought to be avoided unless the specific knowledge, practice, and dispositions teachers must have

to be deemed 'competent' are specifically identified.

### TRANSFORM THE FACULTY IN TEACHER PREPARATION INSTITUTIONS

In order to significantly improve teacher preparation for education of all children training programs need to improve the ability and capacity of faculty to teach about children, families and communities of color, immigrants, and others. Research (Grant & Secada, 1990; Zeichner, 1996) suggests that U. S. teacher educators have generally marginalized education for 'diverse' students, and the present study suggests that early childhood educators are continuing this dubious tradition. To address this problem we contend that faculty in early childhood teacher preparation programs must change dramatically in two ways: 1) present faculty need to improve their capacity to educate teachers who feel prepared and are prepared to effectively meet the developmental and educational needs of children who represent the complexity of cultures, languages, abilities, races, and ethnicities present in early childhood classrooms; and 2) new faculty with needed expertise must be nurtured and recruited to programs.

Existing faculty. Faculty must develop the depth of knowledge regarding the developmental and educational needs of children who are poor, second language/dialect speakers, of color, and others, that prospective teachers must have. Because many teacher education programs may rely on one or two faculty members to teach the 'diversity course(s)' the knowledge other faculty have regarding the developmental and educational needs of children of color, second language/dialect speakers, children with special needs, immigrants, and poor children may lack depth and specificity. Also, in their own professional training faculty may have been socialized to the same Euro-centric view of development typically found in many of their students. In addition, faculty promotion and review (e.g., the definition of success for tenure) is rarely tied to their engagement in activities that help students, the program, and the

field regarding issues of diversity and teacher preparation. Zeichner (1996) reports that recent research on U. S. teacher educators finds, few faculty members of color, a lack of intercultural and interracial experiences, and the "same cultural insularity that is present among teacher education students" (p. 143).

In light of these realities the task of faculty transformation (and hence pedagogical change) faces significant challenges. Because teacher education faculty and students are primarily monolingual White Americans a multi-cultural, -racial, -language and -ethnic community of learners will not be the norm in teacher education programs. In order to stimulate change in teacher education programs that leads to pedagogical and curriculum reforms faculty must engage in personal and collective self-examination, examine their own biases, work with individuals different from themselves—in short, to immerse themselves in the very processes their students need to engage in to be effective practitioners. In some cases this may occur spontaneously—faculty may take it upon themselves to begin this process, but we think that incentives need to be provided to help faculty begin this process. Questions program faculty should address include the following:

1. How many hours of required coursework in my program addresses the developmental and educational needs of children of color, second language/dialect speakers, low-income children, children with special needs and others?

2. To what extent does our program/do I provide a coherent view of child development in context, and place at the center of all instructional activities the development and education of children of color, second language/dialect speakers, learners, children from many cultures, low-income, immigrant, and special needs children?

3. To what extent does our program/do I present knowledge about children of color, second language/dialect speakers, learners, children from many cultures, low-income, immigrant, and special needs children—that problematizes their development and educational needs?

4. To what extent do we segregate knowledge about the developmental and educational needs of [children of color] into one or two courses? This question should be repeated for each group of children, e.g., special needs children, second dialect speakers, second language learners, poor children, and immigrant children.

5. To what extent do I segregate knowledge about the developmental and educational needs of [children of color] in the course(s) I teach? For example, do I provide a range of readings and activities that support student understanding of the complexity of [children of color's] development? This question should be repeated for each group of children, e.g., special needs children, second dialect speakers, second language learners, poor children, children of color, and immigrant children.

6. To what extent does our faculty rely on one or two faculty members to be the 'diversity experts'?

7. What is my 'expertise' regarding the developmental and educational needs of special needs children, second dialect speakers, second language learners, poor children, children of color, immigrants and children from other cultures. What are my training and professional preparation needs? How will I address these identified needs?

8. Does our program prepare teachers to work in culture-specific programs (e.g., particular cultural communities—Navajos, African Americans, Mexican immigrants) or for multicultural programs? If the latter, what are we specifically doing to sufficiently address students' need to learn how to interact with many cultural, language and ethnic groups?

9. How do I/How does our early childhood teacher preparation program faculty address equity and its relationship to diversity—how do I/we perceive this relationship, if at all? Where are these issues raised in the curriculum, if at all?

10. How do we/I assess student competence to work with children of color, second language/dialect speakers, learners, children from many cultures, low-income, immigrants, special needs children, and their families and communities?

New Faculty. In addition to creating incentives to transform early childhood teacher faculty knowledge and dispositions (e.g., commitment, deepening faculty capacity to assure the effective preparation of teachers for all children) incentives (e.g., graduate fellowships in teaching and 'diversity') are needed to encourage the recruitment, and retention of college and university faculty with appropriate expertise who represent all children (e.g., faculty of color, bilingual/bi-dialect speakers, immigrants, and others). We recognize that this is an increasingly challenging goal due to the great gap between need and supply, but incentives that support the development of faculty from these populations can contribute to closing this gap.

## RECRUIT AND RETAIN NEW LEADERS—DEVELOP AND ARTICULATE A WORKFORCE AGENDA AND CAREER LADDER THAT ASSURES DIVERSITY, QUALITY, AND CONNECTS CHILD SUCCESS AND HIGH QUALITY EARLY EXPERIENCES

One of the recurrent criticisms of schools of professional education is the shortage of prospective teachers who share a cultural, language, ethnic or other heritage with their students. The average American teacher is White, monolingual, moncultural, and female. When asked, as prospective teachers, about the children they prefer to work with these students indicate that they want to work with people like themselves (Menken & Antunez, 2001). Such teachers often lack information about cultural differences and similarities or know what to do about them in teaching and learning. Knowledge of cultural differences among racial, linguistic, and national groups is presumed to provide a platform for the development of effective curriculum and teaching strategies. This suggests an advantage to student teachers that attend a program, which is diverse, so that they can both add to and personalize their understanding of individual and group differences through contact with fellow students and faculty from these groups. Given the demographic changes that will be the norm in another generation, exposure and specific instruction regarding children most at educational risk due to poverty and other factors is essential. In addition, if teachers from diverse groups are not recruited now into the workforce pipeline in 20 years the teaching workforce will not be sufficiently diverse to address the educational needs of children.

Scholarships, grants, academic supports (e.g., tutoring, academic writing), advising, and mentoring program graduates once they are in the field, are necessary to create a teacher workforce that mirrors the characteristics of young children in programs. In developing strategies we need to conceptualize the entire professional pipeline including the role of 2-year and 4-year degree programs, graduate programs, none-degree programs (CDA), and professional

development. Bilingual and bi-dialectic teachers, teachers of color, and others presently in the professional pipeline may have had experiences regarding their retention in programs that may help in the development of strategies to support prospective students who are similar to them? There are barriers associated with early childhood education (e.g., low prestige and pay), and these need to be examined in relation to career choices students make at every level of the pipeline.

## RECOMMENDATIONS

College and university bachelor's degree early childhood teacher education programs must:

- Develop knew educational pedagogies that effectively provide prospective early childhood teachers with knowledge regarding the development of all children. These must be based on carefully thought out and detailed rationales regarding the relationship of *all* children's developmental and educational needs to teaching and learning. Central to the development of a knew educational pedagogies is evaluation of how and what research, theories, and practices have been taught across higher education curricula regarding children of color, low-income children, immigrants, second language/dialect speakers, children with special needs, and their families and communities. Language used to describe characteristics of children associated with educational outcomes (e.g., race, language) should be clearly articulated.
- Require all prospective early childhood teachers have training in English as a second language (ESL) and knowledge regarding how bilingualism and bi-dialectism influence teaching and learning.
- Create forums, processes and strategies for developing metrics for the assessment of prospective early childhood teachers' competence to work with children of color, low-income children, immigrants, second language/dialect speakers, children with special needs, and their families and communities.
- Require student practice with children and families who represent many cultures, races, ethnicities, social classes, languages, and special needs.
- Provide graduates forums, seminars and activities (e.g., induction seminars, continuing education) that support their professional growth in effective work with all children and families especially in the first years of entering teaching.
- Explicitly address in course requirements issues of inequality, bias, and discrimination in the creation of a just society, and attend to faculty and teacher values, beliefs, biases, prejudices, and commitment to professional practice that supports equity and social justice.
- Provide incentives (e.g., scholarships, mentoring, induction) that will contribute to the development of an early childhood workforce that reflects the diversity of children and

families served in programs. Recruit and retain students of color, students for whom English is a second language or dialect, and students from impoverished communities into the field and teaching.

The following are recommendations to foundations and others who seek to support the development of educational achievement for all children through improving teacher education programs:

- Create prestigious, high profile competitive grants to early childhood teacher preparation institutions that propose to evaluate and re-design pedagogy, curriculum, and practice to more effectively educate all children. These grants should require significant administrative buy-in (e.g., release time for faculty).

- Convene a consortium of institutions of higher education that focuses on and prepares a national report on the state of early childhood teacher preparation for meeting the developmental and educational needs of all children and equity.

- Convene a working group of individuals with expertise such as, child development in context, bilingualism, bi-dialectism, early childhood education of African Americans, Native Americans, Mexican Americans, and Asian Americans, to develop a comprehensive pedagogy for all children that, includes knowledge, practice, and assessment components. This effort should be: supported for a realistic period of time (e.g., 3-years); involve consultation and review by additional experts and practitioners; result in a final report that is presented in a number of venues (e.g., NAEYC, NBCDI, NABE); and the final report should be disseminated widely.

- Provide support (e.g., for scholarships, mentoring, induction, tutoring, faculty institutes) to early childhood teacher preparation programs that develop innovative plans to recruit and retain students of color, second language/bi-dialectic, immigrants, and others.

- Provide support (e.g., fellowships, grants) to early childhood teacher preparation program faculty that develop innovative plans to recruit and retain faculty of color, second language/bi-dialect speakers, immigrants, and others.

## REFERENCES

American Anthropological Association (1998). American Anthropological Association Statement on "Race", American Anthropological Association (adopted May 27, 1998), [Online] Available: http://www.aaanet.org/stmts/racepp.htm

Association for Children on New Jersey's Early Learning Initiative (2005). *Does "qualified" mean "quality"? Filling the gaps of New Jersey's early childhood teacher training system*. Policy Progress, Building Blocks for New Jersey's Youngest Citizens, Association for Children of New Jersey, Newark, NJ.

Au, K. H., & Mason, J. M. (1981). Social organizational factors in learning to read: The balance of rights hypothesis. *Reading Research Quarterly, 17*(1), 115-152.

Au, K. H., & Mason, J. M. (1983). Cultural congruence in classroom participation structures: Achieving a balance of rights. *Discourse Processes, 6* (2), 145-167.

Banks, J. A. (1993). Multicultural education for young children: Racial and ethnic attitudes and their modification. In B. Spodek (Ed.), *Handbook of research on the education of young children* (pp. 236-250). New York, NY: Macmillan/McGraw Hill.

Banks, J. A., & Lynch, J. (Eds.) (1986). *Multicultural education in western societies.* Austin, TX: Holt, Rinehart and Winston.

Bondy, E., & Ross, D. D. (1998). Confronting myths about teaching Black children: A challenge to teacher educators. *Teacher Education and Special Education*, ***21***, 241-254.

Bowman, B. T. (1989). Educating language-minority children. *ERIC Digest*. Urbana, IL: ERIC Publications.

Bowman, B., Donovan, S., Burns, S. (2001). *Eager to Learn: Educating our Preschoolers*. Washington, DC: National Academy Press.

Bureau of Labor Statistics (1999). *Labor force participation of fathers and mothers varies with children's ages.* [Online] Available: http://www.bls.gov/opub/ted/1999/Jun/wk1/art03.htm

Campbell, S.B. (1995). Behavior problems in preschool children: A review of recent research. *Journal of Child Psychology and Psychiatry, 36*, 113–149.

Children's Defense Fund (2000). *The state of America's children: A report from the Children's Defense Fund.* Boston, MA: Beacon Press.

Cohen, L. H. (1994). *Train go sorry: Inside a deaf world*. New York: Vintage Books.

Council for Exceptional Children (2002). *What every special educator must know: Ethics, standards, and guidelines for special educators* (5th edition). Arlington, VA: Council for Exceptional Children. [Online] Available: www.ncate.org/standard/new %20program%standards/cec_2002.pdf

Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives, **8**, 1*, January.

Darling-Hammond, L., Pittman, K. J., & Ottinger, C. (1987). *Career choices for minorities: Who will teach?* Washington, D.C.: National Education and Council of State School Officers Task Force on Minorities in Teaching.

Dean, R. G. (2001). The myth of cross-cultural competence. *Families in Society, **82***, 623-630.

Dee, T. S. (2004). Teachers' race and student achievement in a randomized experiment. *The Review of Economics and Statistics, **86***(1), 195-210.

Derman-Sparks, L., & Phillips, C. B. (1997). *Teaching/learning anti-racism: A developmental approach.* Washington, D.C.: National Association for the Education of Young Children.

Dieker, L., Voltz, D. & Epanchin, B. (2002). Report of the Wingspread Conference preparing teachers to work with diverse learners. *Teacher Education and Special Education,* ***25***, 1-10.

Federal Interagency Forum on Child and Family Statistics (2005). *America's children: Key national indicators of well-being 2005*. Federal Interagency Forum on Child and Family Statistics, Washington, D. C: U. S. Government Printing Office.

Fillmore, L. W., & Meyer, L. M. (1992). The curriculum and linguistic minorities. In P. Jackson, (Ed.). *Handbook of research on curriculum: A project of the American Educational Association* (pp. 626-658). New York, NY: Macmillian.

Fillmore, L. W., & Snow, C. E. (2000, August 31). *What Teachers Need to Know About Language.* Center for Applied Linguistics. [Online] Available: www.cal.org/ericc11/teachers/teachers.pdf

Garcia, E. E. (2005). *Teaching and learning in two languages: Bilingualism and schooling in the United States.* New York: Teachers College Press.

Garcia Coll, C., Lamberty, G., Jenkins, R., McAdoo, H. P., Crnic, K., Wasik, B. H., & Garcia, H. V. (1996). An integrative model for the study of developmental competencies in minority children, *Child Development, 67*, 1891-1914.

Gaskins, S., Miller, P. J., & Corsaro, W. A. (1992). Theoretical and methodological perspectives in the interpretive study of children. In W. Corsaro & P. J. Miller (Eds).

*Interpretive approaches to children's development* (pp. 5-24), *New Directions in for Child Development, no. 58*, San Francisco, CA: Jossey-Bass.

Gay, G. (1995). Bridging multicultural theory and practice. *Multicultural Education, 3(1),* 4-9.

Gay, G. (1986). Multicultural teacher education. In J. A. Banks & J. Lynch, (Eds.). *Multicultural education in Western societies* (pp. 154-177). London, ENG: Holt, Rinehart & Winston.

Giroux, H. A. (1996). *Fugitive cultures: Race, violence, and youth.* New York, NY: Routledge.

Gould, S. J. (1981). *The mismeasure of man.* New York, NY: W. W. Norton.

Grant, C. A. & Secada, W. G. (1990). Preparing teachers for diversity. In W. R. Houston (Ed.), *Handbook of Research on Teacher Education* (pp. 403-422). New York, NY: Macmillan.

Head Start Bureau. (2000). *Celebrating cultural and linguistic diversity in Head Start.* Washington, D.C: Commissioner's Office of Research and Evaluation and the Head Start Bureau.

Howard, G. (1999). *We can't teach what we don't know: White teachers, multiracial schools.* New York: Teachers College Press.

Hyson, M. C. (1996). Theory: An analysis (part 2). In J. A. Chafel & S. Reifel (Eds.). *Advances in early education and early care, Vol. 8: Theory and practice in early childhood teaching* (pp. 41-89). Greenwich, CT: JAI Press.

Irvine, J. I. (1990). *Black students and school failure.* Westport, CT: Greenwood Publishing Group.

Irvine, J. I. (2003). *Educating teachers for diversity: Seeing with a cultural eye.* New York, NY: Teachers College Press.

Jones, K. H., & Black, R. S. (1995). Teacher preparation and diversity: A national study of certification requirements. *Journal of Vocational and Technical Education, 12(1),* 1-14. [Online] Available: http://scholar.lib.vt.edu/ejournals/JVTE/v12n1/jones.html

Ka□itçiba□i, Ç. (1996). *Family and Human development across cultures: A view from the other side.* Mahwah, NJ: Lawrence Erlbaum.

Kalyanpur, M., & Harry, B. (1999). *Culture in special education: Building reciprocal family-professional relationships.* Baltimore, MD: Paul H. Brookes.

Kearney, C. A., & Durand, V. M. (1992). How prepared are our teachers for mainstreamed classroom settings? A survey of postsecondary schools of education in New York state. *Exceptional Children,* ***59***, 6-11.

Khu, J. M. T. (2001). *Cultural curiosity: Thirteen stories about the search for Chinese roots*. Berkely, CA: University of California Press.

Knapp, M. S., & Associates, (1995). *Teaching for meaning in high-poverty classrooms.* New York: Teachers College Press.

Kozol, J. (1991). *Savage inequalities.* New York: Harper Perennial.

Ladson-Billings, G. (1995). Multicultural teacher education: Research, practice, and policy. In J. A. Banks & C. M. Banks (Eds.), *Handbook of research on multicultural education* (pp. 747-759). New York, NY: Macmillan.

Ladson-Billings, G. (1999). Preparing teachers for diverse student populations: A critical race theory perspective. In A. Iran-Nejad & P. D. Pearson (Eds.), *Review of research*

*in educatin 24* (pp. 211-247). Washington, D. C.: American Educational Research Association.

Lane, H., Hoffmeister, R., & Bahan, B. (1996). *A journey into the Deaf-world.* San Diego, CA: DawnSignPress.

Liu, E. (1998). *The accidental Asian: Notes of a native speaker*. New York, NY: Vintage Books.

Maharidge, D. (1996). *The coming white minority: California, multiculturalism, and America's future.* New York, NY: Vintage Press.

Menken, K., & Antunez, B. (2001). *An overview of the preparation and certification of teachers working with limited English proficient (LEP) students.* Washington, D. C.: National Clearinghouse for Bilingual Education.

Menken, K., & Holmes, P. Balancing teacher quantity with quality. National Center for Bilingual Education. Available online:: http://ww.ncela.gwu.edu/pubs/tasynthesis/framing/5teacherqualtiy.pdf

Miller, P. J., & Goodnow, J. J. (1995). Cultural practices: Toward an integration of culture and development. In J. J. Goodnow, P. J. Miller, & F. Kessel (Eds.), *Cultural practices as contexts for development, New Directions for Child Development, no. 67,* San Francisco, CA: Jossey-Bass.

Miller, M., Strosnider, R., & Dooley, E. (2002). States' diversity requirements for teachers. *Teacher Educatioon and Special Education, **25***, 32-40.

Moses, M. (2002). *Embracing race: Why we need race-conscious education policy.* New York: Teachers College Press.

Nsamenang, A. B. (1992). *Human development in cultural context: A third world perspective.* Newbury Park, CA.: Sage.

National Association for the Education of Young Children (2002). *NAEYC Standards for early childhood professional preparation: Baccalaureate or initial licensure level.* Washington, DC: NAEYC.

National Commission on Teaching and America's Future (1996). *What matters most: Teaching for America's future.* New York: Author. [Online] Available: http://www.nctaf.org/publications/WhatMattersMost.pdf

National Council for Accreditation of Teacher Education (2002). *Professional standards for the accreditation of schools, colleges, and departments of education* (2002 edition). Washington, D. C.: Author.

National Education Association (2004). *What the research says.* [Online] Available: http://www.nea.org/teachers/research-teachers.html

Pang, V. O. & Sablan, V. A. (1998). Teacher efficacy: How do teachers feel about their abilities to teach African American students? In M. E. Dilworth (Ed.) *Being responsive to cultural differences: How teachers learn* (pp. 39-58). Thousand Oaks, CA: Corwin Press.

Pewewardy, C. D. (1994). Culturally responsible pedagogy in action: An American Indian magnet school. In E. R. Hollins, J. E. King & W. C. Hayman (Eds.) *Teaching diverse populations: Formulating a knowledge base* (p. 77-92). Albany, NY: State University of New York.

Phinney, J. S., & Rotheram, M.J. (Eds.) (1987). *Children's ethnic socialization: Pluralism and development*. Newbury Park, CA: Sage.

Portes, A. (1996). Introduction: Immigration and its aftermath. In A. Portes (Ed.) *The new second generation* (pp. 1-7). New York: Russell Sage.

Ray, A. (2000). Understanding multicultural and anti-bias education. In C. Howes (Ed.), *Teaching 4- to 8-year olds: Literacy, math, multiculturalism, and classroom community* (pp. 135-156). Baltimore: Paul H. Brookes.

Ray, A. & Bowman, B. (2003). *Learning Multi-Cultural Competence: Developing Early Childhood Practitioners' Effectiveness In Working with Children From Culturally Diverse Communities,* Final Report to the A. L. Mailman Family Foundation. Center for Race, Class, and Culture in Early Childhood, Erikson Institute, Chicago, IL.

Ray, A., Bowman, B., & Robbins, J. (2006). Preparing Early Childhood Teachers to Successfully Educate *All* Children: The Contribution of State Boards of Higher Education and National Professional Accreditation Organizations, A Project on Race, Class and Culture in Early Childhood, Erikson Institute, Chicago, IL., Report to the Foundation for Child Development, New York, NY.

Rizvi, F. (1993). Children and the grammar of popular racism. In C. McCarthy & W. Crichlow (Eds.). *Race, identity, and representations in education* (pp. 126-139). New York: Routledge.

Rosenblum, K. E., & Travis, T. C. (Eds.) (2000). *The meaning of difference: American constructions of race, sex and gender, social class, and sexual orientation (2nd edition)*. Boston: McGraw-Hill.

Saluja, G., Early, D. M. & Clifford, R. M. (2002). Demographic characteristics of early childhood teachers and structural elements of early care and education in the United

States. Early Childhood Research & Practice, ***4***, 1-19. Available [On-line] http://ecrp.uiuc.edu/v4n1/saluja.html

Schermerhorn, R. A. (1970, 1978). *Comparative ethnic relations*. Chicago, IL: University of Chicago Press.

Shyer, M. F., & Shyer, C. (1996). *Not like other boys—Growing up gay: A mother and son look back*. Los Angeles, CA: Alyson Books.

Sleeter, C. E. (1993). How white teachers construct race. In C. McCarthy & W. Crichlow, (Eds.), *Race, identity, and representation in education* (pp. 157-170). New York, NY: Routledge.

Solomon, A. (1994). Defiantly deaf, *The New York Times Magazine* (August 28), pp. 34-49.

Takaki, R. (1994). At the end of the century: The "Culture Wars" in the U. S. In R. Takaki (Ed). *From different shores: Perspectives on race and ethnicity in America (2nd edition)* (pp. 296-299). New York: Oxford University Press.

Tatum, B. D. (1997). *"Why are all the Black kids sitting together in the cafeteria?" and other conversations about race*. New York: Basic Books.

Tom, A. R. (1996). External influences on teacher education programs: National accreditation and state certification. In K. Zeichner, S. Melnick & M. L. Gomez (Eds.), *Currents of reform in preservice teacher education* (pp. 11-30). New York: Teachers College Press.

Tom, A. R. (1997). *Redesigning teacher education.* New York: State University of New York Press.

U. S. Bureau of the Census (1994, January). Americans with disabilities. *Bureau of the Census Statistical Briefs (SB/94-1)*. Washington, D.C: U. S. Department of Commerce.

U. S. Bureau of the Census (1999). Ethnic and Hispanic Statistics Branch, Population Division, U. S. Bureau of Current Population Survey, March 1999. [Online] Available: http://www.census.gov/population/socdemo/foreign/cps1999/tab0301.txt

U. S. Bureau of the Census (1998). World population profile: 1998. [Online] Available: http://www.census.gov/ipc/www/wp98001.html

U. S. Department of Education (2002). The No Child Left Behind Act of 2001: Fact Sheet. [Online] Available: http://www.ed.gov/offices/OESE/esea/exec-summ.html

Vàldes, G. (1996). *Con respeto: Bridging the distances between culturally diverse families and schools, An ethnographic portrait.* New York: Teachers College Press.

Valli, L., & Rennert-Ariev, P. (2000). Identifying consensus in teacher education reform documents: A proposed framework and action implications. *Journal of Teacher Education,* ***51*** (1), 5-17.

VanAusdale, D., & Feagin, J. R. (2001). *The first R: How children learn race and racism.* Lanham, MD: Rowman & Littlefield.

Vavrus, M. (2002). *Transforming the multicultural education of teachers: Theory, research and practice.* New York: Teachers College Press.

Vermont Department of Education (2003). *State Board of Education Manual of Rules and Practices, Licensing Regulations, 5100 Statutory Authority, 5150.* Burlington, VT: Vermont Department of Education.

Violand-Sanchez, Suton & Ware, 1991

Voltz, D. L. (1998). Cultural diversity and special education teacher preparation: Critical issues confronting the field. *Teacher Education and Special Education,* ***21***, 63-70.

Waters, M. C. (1996). Ethnic and racial identities in second-generation Black immigrants in New York City. In A. Portes (Ed.) *The new second generation* (pp. 171-196). New York: Russell Sage.

Webb-Johnson, G., Artiles, A. J., Trent, S. C., Jackson, C. W., & Velox, A. (1998). The status of research on multicultural education in teacher education and special education. *Remedial & Special Education, 19(1),* 7-16.

Weber, E. (1984). *Ideas influencing early childhood education: A theoretical analysis.* New York: Teachers College Press.

Whitebook, M., Bellm, D., Cruz, E., Munn, M., Jo, J. Y., Almaraz, M., & Lee, Y. (2004). *Training the next generation of teachers: A preliminary survey of California's higher education programs in early education and child development.* Berkeley, CA: Center for the Study of the Child Care Employment, University of California at Berkeley. [Online] Available: www.iir.berkeley.edu/cscce/pdf/training_next_teachers.pdf

Zeichner, K. (1996). Educating teachers for cultural diversity. In K. Zeichner, S. Melnick & M. L. Gomez (Eds.), *Currents of reform in preservice teacher education* (pp. 133-175). New York: Teachers College Press.

Zentrella, A. C. (1997). *Growing up bilingual: Puerto Rican children in New York*. Malden, MA: Blackwell.

Zola, I. K. (1993). Self, identity and the naming question: Reflections on the language of disability. *Social Science Medicine, 36*, 167-173.

# Appendix A. Methods

*The following is a detailed description of the methodology used to investigate all research questions.*

*Sample.* Starting in fall 2003, an initial list of bachelor's degree early childhood teacher preparation institutions was gathered from 8 national sources: 1) National Center for Education Statistics – Integrated Postsecondary Education Data System (NCES-IPEDS); 2) National Directory of Early Childhood Teacher Preparation Institutions developed by the Council for Professional Recognition and the National Center for Early Development and Learning at University of North Carolina Chapel Hill; 3) National Council for the Accreditation of Teacher Education (NCATE) 2002 list of accredited programs; 4) State education agency lists of colleges and universities with approved teacher education programs; 5) United Negro College Fund list of member institutions; 6) National Association of State Universities and Land-Grant Colleges; 7) The Tribal College Journal; and 8) The Hispanic Association of Colleges and Universities (see Appendix B for web address of data for each association listed above).

Our goal was to create a national sample of programs preparing early childhood teachers. In each state and the District of Columbia we sought 6 institutions that train teachers to work with young children in preschool and early elementary classrooms. The eligibility criteria used to filter institutions chosen for the analysis were that:

1. The institution offers a bachelor's degree in early childhood education or one that enables bachelor degree graduates upon graduation to receive initial, provisional or permanent certification to teach in early childhood classrooms (pre-kindergarten through early elementary grades). Hence programs that require a post-undergraduate fifth year of teacher training prior to certification were excluded from this study.

2. The program prepares teachers to teach in pre-kindergarten (e.g., age 3) to the early elementary grades (e.g. 3rd, 4th, 5th grades). Programs that only prepare teachers for pre-K or kindergarten and early elementary grades are not included in this analysis.

3. The program is accredited by the National Council for Accreditation of Teacher Education (NCATE), or a regional body (e.g. North Central Association, Southern Association of Colleges and Schools).

4. The institution's entire student population was either ≤9000 (small) or ≥9001 (large).

5. The institution had an historic mission to educate diverse populations (e.g., African Americans, the Deaf, Hispanics, and Native Americans), or was a predominately 'majority' institution. The pool of 699 included 37 of the former institutions, and we refer to them as colleges and universities dedicated to underserved populations (CUUP). The remaining 662 institutions we refer to as 'majority' or MCU.

Each of the 662 institution's website was searched to confirm that all criteria were met, and to determine, in each state, those that have eligible early childhood teacher education programs. Twenty-four states and the District of Columbia have 6 or fewer schools that met study criteria, and all of these schools were placed in the sample. For each of the 22 states with 7 or more teacher training institutions we included where possible the 2 largest institutions (total student population is ≥9001 students), two smaller institutions (total student population ≤9000), and randomly selected two additional institutions with an attempt to include, where possible, a larger and smaller institution.

Two-hundred majority and 26 CUUP institutions that award bachelor's degrees to early childhood teachers met all study criteria and constitute the focus of analysis regarding teacher preparation requirements that address children's characteristics including the 11 categories of diversity examined in this study (see Table 9 and Appendix C). These 226 institutions represent nearly one-third (32 percent) of the 699 institutions we initially identified. A maximum of 6 majority institutions per state were added to the final sample

where possible, and for those states with CUUP institutions, these were included. For example, Alabama includes 9 teacher-training programs—6 majority and 3 CUUP.

Table 9. Number of Majority Bachelor's Degree Early Childhood Teacher Preparation Programs (ECTPP) by State and the District of Columbia*

| Total Majority ECTPP Per State | 45 States** & D.C. | | | Total Number of States |
|---|---|---|---|---|
| 1 | Alaska<br>Delaware | Hawaii<br>Mississippi | Nevada<br>Wyoming | 6 |
| 2 | District of Columbia* | Idaho<br>Maine | North Dakota<br>Rhode Island | 5 |
| 3 | Colorado<br>Montana | New Hampshire | South Dakota*<br>Texas | 5 |
| 4 | New Mexico | Utah | | 2 |
| 5 | Iowa<br>Maryland* | Massachusetts<br>Vermont | Virginia*<br>Washington | 6 |
| 6 | Louisiana | | | 1 |
| 7 or more | Alabama*<br>Arkansas*<br>Connecticut<br>Florida*<br>Georgia*<br>Illinois<br>Indiana | Kansas<br>Michigan<br>Minnesota<br>Missouri<br>Nebraska<br>New Jersey<br>New York* | Ohio<br>Oklahoma*<br>Oregon<br>Pennsylvania*<br>South Carolina*<br>Tennessee*<br>Wisconsin | 21 |

*Indicates a state or district with majority and 1 to 4 CUUP institutions.
** Five states (i.e., Arizona, California, Kentucky, North Carolina, West Virginia) were excluded from the analysis of teacher training institutions because they offered neither certification nor endorsements for early childhood education within the range of birth to 6th grade.

Ninety-five percent of 226 teacher preparation programs are in schools of education (n=214); with only 3 percent (n=7) in departments of consumer and family science, family studies, and child development; and 2 percent (n=5) in interdisciplinary programs (Table 10). Eighty percent of teacher preparation programs only offer a degree in early childhood education, 10 percent offer both early childhood special education and early childhood blended concentrations, 8 percent offer both blended early childhood special education and

blended early childhood bilingual, 1.5 percent early childhood education and early childhood bilingual programs, and .5 percent early childhood education and early childhood special education and early childhood bilingual.

Table 10. Degree Concentrations Of Bachelor's Degree Early Childhood Teacher Education Programs

| Concentration | All Programs | |
|---|---|---|
| | Number | %* |
| Early Childhood (EC) Education Only | 180 | 80 |
| EC Special Education & EC Blended Concentrations | 22 | 10 |
| Blended EC Special Education & Blended EC Bilingual | 18 | 8 |
| EC Education & EC Bilingual Programs | 4 | 1.5 |
| EC Education & EC Special Education & EC Bilingual | 2 | .5 |
| Total | 226 | 100 |

*All percentages are rounded

The average student population in the 225 institutions with early childhood teacher preparation programs is 10,583 students (see Table 11). In smaller institutions the average number of students is 3,094, and in larger institutions the average is 20, 265. The total student population of one college could not be determined.

Table 11. Average Student Populations in Bachelor's Degree Early Childhood Teacher Preparation Programs

| Statistic | Total in Sample | Schools ≤9000 Students | Schools ≥9001 Students |
|---|---|---|---|
| Number | 225 | 99 | 126 |
| Percent | 100 | 44 | 56 |
| Mean | 10,583 | 3,094 | 20,265 |
| Range | 280 - 52,261 | 280 – 8,930 | 9,074 - 52,261 |

*One missing college

The database of 226 schools includes 10 percent (n=23) that are historically Black colleges and universities, and less than 2 percent (1 each) dedicated to the education of

Hispanic students, Native American students, and Deaf students (see Table 12). Two hundred (88.5 percent) are 'majority' public and private institutions that do not share this history or identity.

Table 12. Percentage of Majority and CUUP Bachelor's Degree Early Childhood Teacher Training Institutions

| Institutions | Number | %* |
|---|---|---|
| Majority Institutions | 200 | 88.5 |
| Historically Black Institutions | 23 | 10 |
| Hispanic Serving Institutions | 1 | .44 |
| Native American Serving Institutions | 1 | .44 |
| Deaf Serving Institutions | 1 | .44 |
| Totals | 226 | 100 |

*All percentages are rounded

*Data Collection and Analysis.* In order to explore how undergraduate teacher requirements reflect expectations that teachers will master content and practice skills related to children of color, poor children, children for whom English is a second language or dialect, children with special needs, immigrant children, and children from many cultural and ethnic groups found in early childhood classrooms we chose to analyze documents available online for text that included references, phrases, terms and language related to children's characteristics Categories of children's characteristics typically associated with 'diversity' of interest to this study include the following:

- *Race* which refers to terms and phrases related to an American social construction that relies on a concentration of particular physical features (e.g., skin color) in assigning individuals to racial categories (e.g., White), and in distributing particular social, economic and political benefits based on racial group assignment.

- *Ethnicity* which refers to the "real or putative common ancestry, memories of a shared historical past, and a cultural focus on one or more symbolic elements" such as kinship patterns, language or dialect, that define a group within an existing society (Schermerhorn, 1970, 1978, p. 12).

- *Culture* is defined as "the prism through which members of a group see the world and create shared meaning" (Bowman, 1989, p. 2). It is a dynamic social construction that adapts to collective experiences, historical time, and ecological conditions.

- *Language* which refers to second language and second dialect speakers.

- *Immigrant status* refers to children and families who are first generation migrants to the U. S., and children born in the U. S. whose parents are recent immigrants.

- *Social class* refers to the comparative economic disadvantage of poor children to their middle class peers, and is generally defined by parental income and education.

- *Special needs* refers to conditions (e.g., physical, psychological) that limit a child's ability to engage in activities typical for children of a given age, and eligibility for services or therapy for developmental needs (U. S. Bureau of the Census, 1994).

- *All children* appears to be a term that is meant to indicate that early childhood teachers are responsible for the education of children from all groups, families and communities; and with all developmental and educational needs.

- *Diversity* is an umbrella term that may or may not specify the particular characteristics of children (e.g., race, culture) to whom it refers, and generally implies children who are not middle class, White, monolingual (English) and able bodied.

- *Minorities* refers to a variety of groups of children who are not members of the so-called 'majority' (e.g., middle class, White, monolingual [English] and able bodied), namely children of color, children in poverty, children for whom school English is a second language or second dialect, and children with special needs.

- *Learner characteristics* refers to a child's individual abilities and capacities related to learning; generally used in reference to teaching and learning tasks in school settings.

We reviewed documents searching for text and language that references these eleven characteristics. Each category includes synonyms of the category identifier (see Table 13). For example, if a term appears in the data that signifies race (e.g., racial identity, racism, racial characteristics, and racial group) it is coded in the race category. The intent of authors of bachelor's degree requirements use of language that refers to children's characteristics examined is beyond the scope to this study. It appears that some types of language that refers to child characteristics of interest to us may be used interchangeably (e.g., culture and

ethnicity, race and ethnicity). Because of this the principal investigators felt that terms used to refer to children characteristics (e.g., race, social class, culture) do not always form discrete mutually exclusive categories (despite our attempt to impose order on them).

Table 13. Diversity Categories

| | Coding Category | Examples of Terms Associated with Diversity Categories |
|---|---|---|
| 1 | *Race* | Race, people of color, racism, multiracial, racial groups |
| 2 | *Ethnicity* | Ethnicity, heritage, ethnic identity, ethnic background |
| 3 | *Culture* | Culture, multicultural, diverse cultures, cultural identity |
| 4 | *Language* | English language learners, new language learners, first language is not English, second language learners, second language acquisition, Spanish (and other specific languages), Bilingual, ELL, ESL, ESOL, TESOL, dialect speakers, dialect differences, home language |
| 5 | *Immigrant Status* | Immigrant(s), nation of origin, foreign, foreign-born |
| 6 | *Social Class* | Social Class, socioeconomic, low-income, poor, class |
| 7 | *Special Needs* | Special needs, disabilities, atypically developing, exceptionalities, inclusion, special populations, mainstreaming, handicapped, IEP/IFSP |
| 8 | *All Children* | All Children, all individuals, all students |
| 9 | *Diversity* | Diversity, diverse communities, diverse families, children in a diverse society |
| 10 | *Minorities* | Minorities, minority groups |
| 11 | *Learner Characteristics* | Learner Characteristics, diverse learners, different learning styles, varying abilities |

Initially, our intention was to limit this study to early childhood professional development requirements for teachers working with children 3 to 8 years of age, or Pre-K through 3rd grade. But, because of the variability in ages covered in early childhood teacher preparation programs, we include programs that cover a *continuous* age range from birth to early elementary school ages. Excluded are professional requirements that do not include

children in both preschool (e.g., birth to 4 years of age) and early elementary grades (e.g., kindergarten through 5th grade). For example, teacher education programs that prepare teachers only for Pre-K or only for birth through age 4 but do not include children in kindergarten and early elementary grades were not included in this analysis.

All aspects of data collection were directed by the principal investigators. Coding instruments were developed by the principal investigators; research staff were trained to apply these to data; and coding was checked by the principal investigators and differences resolved through consensus. Terms infrequently found in data that referred to children's characteristics, such as gender, gender preference, sexual orientation, and religion, were coded as 'other'.

Researchers established decision rules to gather 24 categories of data (see Appendix D) from websites for the 226 institutions in our sample including: early childhood concentration or specialization; degree granted and major; content in program reviews that reference children's characteristics including the eleven diversity categories (e.g., race, culture); required professional semester hours; required special education semester hours; course titles of explicit and embedded diversity courses; and required student teaching in a setting in which children with varying characteristics (e.g., race, culture, special needs) are educated.

In addition, any description of the required professional education courses, the program review (a statement of the program's goals, focus and mission vis-à-vis students), and early childhood required course descriptions were analyzed. We limited our analysis to only professional course requirements (e.g., child development, curriculum methods), and did not include in this analysis elective courses or general education courses (with the

exception of the analysis of a foreign language general education requirement). We also created two other datasets: 1) 151 institutions with and 75 without NCATE accreditation; and 2) 26 CUUP and 200 'majority' institutions, that permit us to explore the questions of interest to this study from different perspectives. Statistical analyses used throughout are descriptive—tallies, percentages, ranges, and ratios. The data does not support the use of *t*-tests or other more elaborate statistical analyses.

Documents varied in both the diversity categories used and in the frequency with which synonyms for categories appeared in the documents. We found that simply counting the number of times teacher education documents (e.g., course descriptions, program descriptions) referred to a particular diversity category (e.g., culture) led to a false impression that risked associating quantity of use of that language with greater attention to the developmental and educational needs of children with that characteristic. It was impossible to determine the intent of the authors who used a term such as culture numerous times in documents, but did not refer to other diversity categories of interest to this study. To address this concern we only counted each use of a specific diversity category once in a course or program desciption. Hence regardless of how many times a given teacher education program's course description referred to culture, we only tallied culture once for that single course. Only the course and program descriptions themselves were coded.

In order to determine the semester hours of course work students are required to take we created two categories of courses—*explicit* and *embedded*—in which we found references to our 11 diversity categories or similar language, these two. Institutions with quarter-hour credits were converted to semester hours for this analysis. We summed required explicit and embedded semester hours of course work to calculate the total semester hours of what we

referred to as ‘required diversity course work’ per school. Explicit courses are those that include diversity categories in the title and in the course description. For example, courses with titles such as, Teaching Children in a Multicultural Society, Cognitive Development in a Diverse Society, or Language Development in Multilingual Schools, were defined as explicit courses. Embedded courses are those in which the title does not include a reference to diversity, but the course description indicates that issues, such as second language learners, children with special needs, are addressed in the course. For example, a course titled Language Development in Young Children with a course description that includes a phrase such as, ‘this course will examine language development in monolingual and bilingual learners’ is considered an embedded diversity course. Three institutions are excluded from this analysis because they do not require specific courses for degree completion, but allow students to design, with faculty guidance, a program of study that includes courses and practice experiences that meet program and student goals.

Appendix B. Data Sources for Identification of Bachelor's Degree

Early Childhood Teacher Education Programs

- National Center for Education Statistics – Integrated Postsecondary Education Data System (NCES-IPEDS) online at:
  http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2003168

- National Directory of Early Childhood Teacher Preparation Institutions developed by National Center for Early Development and Learning at UNC Chapel Hill and the Council for Professional Recognition
  http://www.cdacouncil.org/ndir/ndir_intro.htm

- National Council for the Accreditation of Teacher Education (NCATE) list of accredited programs – 2002
  http://www.ncate.org/public/institlist.asp?ch=146

- United Negro College Fund list of member institutions
  http://www.uncf.org/members/index.asp

- National Association of State Universities and Land-Grant Colleges
  http://www.nasulgc.org/About_Nasulgc/Members_HBCU.htm

- The Tribal College Journal
  http://www.tribalcollegejournal.org/aihec/aihec.html

- Hispanic Association of Colleges and Universities
  http://www.hacu.net/assnfe/CompanyDirectory.asp?STYLE=2&COMPANY_TYPE=1,5

- State education agency lists of approved teacher education programs in colleges and universities:
  1. Alabama:
  ftp://ftp.alsde.edu/documents/66/Teacher%20Education%20Programs%20at%20Each%20Alabama%20College%20or%20University%20010504.pdf
  2. Alaska:
  http://www.eed.state.ak.us/TeacherCertification/downloads/ApprovedProgramDirectory.pdf
  3. Arizona: No list of state approved teacher preparation programs could be located.
  4. Arkansas:
  http://arkedu.state.ar.us/word_files/final%20IHE%20license%20area%20Matrix%20MODIFIED%206-22-04.xls
  5. California:
  http://134.186.81.78/CAW_CIG/FMPro?-DB=CIG_Approved_Program_Matrix.fp5&-Format=WWW-ApprovedPrograms.html&-Error=WWW-ApprovedProgramsError.html&-sortfield=institution%20type&-sortfield=Name&-max=all&-FindAll

6. Colorado:
http://www.state.co.us/cche/academic/approvedprograms/inst.pdf
7. Connecticut:
http://www.state.ct.us/sde/dtl/cert/links.htm
8. Delaware:
http://www.doe.state.de.us/high-ed/DEcolleges.htm
9. Florida:
http://www.firn.edu/doe/profdev/teachprep/university
10. Georgia:
http://www.gapsc.com/ApprovedPrograms/EducationProgram.asp?x=40&y=7
11. Hawaii:
http://www.htsb.org/forms/SATE.prog.rev.5.15.pdf
12. Idaho:
http://www.sde.state.id.us/certification/resourceed.asp
13. Illinois:
http://www.isbe.state.il.us/teachers/Universities/univ.htm
or http://www.isbe.net/profprep/PDFs/Directory.pdf
14. Indiana:
http://www.state.in.us/psb/licensing/apbysubject2002/index.html
15. Iowa:
http://www.state.ia.us/boee/endscol.html
16. Kansas:
http://www.ksde.org/cert/By%20Endorsement.HTM
17. Kentucky:
http://www.kyepsb.net/teacherprep/approved.asp
18. Louisiana:
http://www.teachlouisiana.net/recruitment/ApprovedPrograms.asp
19. Maine:
http://www.state.me.us/education/highered/Teacher%20Education/TeacherEduc.htm
20. Maryland:
http://directory.msde.state.md.us/map/LocalFrames.asp
21. Massachusetts:
https://www4.doemass.org/elar/licensurehelp/FindPrepProgramPostControl.ser?programId=1
22. Michigan:
http://136.181.114.10/proprep/ProgramInfo.asp?Program_ID=61
23. Minnesota:
http://education.state.mn.us/content/026531.pdf
24. Missouri:
http://www.dese.mo.gov/divteachqual/teached/directory/basic%20programs.pdf
25. Mississippi:
http://www.ihl.state.ms.us/admin/downloads/academicfinal.pdf
26. Montana:
http://www.opi.state.mt.us/index.html
http://www.state.mt.us/education/higher_edu.asp
27. Nebraska:

http://www.nebraskateachereducation.org/Approved%20Teacher%20Education%20Programs.htm
28. Nevada:
No list of state approved teacher preparation programs per phone call to State Board of Education 7/28/04
29. New Hampshire:
http://www.ed.state.nh.us/Certification/listof.htm
30. New Jersey:
http://www.state.nj.us/highereducation/schools.htm
http://www.hesaa.org/students/nj_colleges/listing.asp
31. New Mexico:
http://www.nmche.org/colleges/fouryear.asp
32. New York:
http://www.nysed.gov/COMS/RP090/IRP2BB
33. North Carolina:
http://teach4nc.org/certification/
34. North Dakota:
http://state.nd.us/espb/approval/grad/pa.pdf or
http://www.state.nd.us/espb/resource/college.htm
35. Ohio:
http://www.ode.state.oh.us/teaching-profession/teacher/educator_preparation/early_child.asp ECE Undergrad Programs
http://www.ode.state.oh.us/teaching-profession/teacher/educator_preparation/endorse_eeh.asp EC Handicapped
http://www.ode.state.oh.us/teaching-profession/teacher/educator_preparation/endorse_prek.asp Pre-K Endorsement
http://www.ode.state.oh.us/teaching-profession/teacher/educator_preparation/endorse_tesol.asp Multi age TESOL
36. Oklahoma:
http://sde.state.ok.us/home/defaultie.html
37. Oregon:
http://www.ous.edu/aca/programs.htm or http://www.tspc.state.or.us/programs.asp
38. Pennsylvania:
http://www.teaching.state.pa.us/teaching/cwp/view.asp?a=6&Q=32315&teachingNav=%7C5936%7C
39. Rhode Island:
http://www.ridoe.net/teacher_cert/teacher_prep/Institutions.htm
40. South Carolina
http://www.scteachers.org/Educate/edpdf/appprogrs.pdf
41. South Dakota:
http://www.state.sd.us/deca/OPA/Teacher%20Certification/teachprepprogs.pdf
42. Tennessee:
http://www.k-12.state.tn.us/ihelicense/AddOn.asp?addon=34
43. Texas:
http://www.sbec.state.tx.us/SBECOnline/approvedprograms.asp?s=1
44. Utah:

http://www.usoe.k12.ut.us/cert/PrepPrograms/area.htm
45. Vermont:
http://www.ahs.state.vt.us/earlychildhood/develop.htm#cert
46. Virginia:
http://www.pen.k12.va.us/VDOE/newvdoe/CollegeEndorsements.pdf
47. Washington
http://www.k12.wa.us/Certification/colleges/EndTablebySubject.pdf
http://www.k12.wa.us/certification/endorsement/endorselist.aspx
48. West Virginia:
http://www.ncate.org/accred/list-institutions institutions /eastern.htm#wvirginia
49. Wisconsin:
http://www.dpi.state.wi.us/dpi/dlsis/tel/indexed.html
50. Wyoming:
Does not approve teacher education programs. The only teacher education program in Wyoming is the University of Wyoming.
http://ed.uwyo.edu/Departments/depteled/undergrad.htm
51. District of Columbia (Washington D.C.):
(8-2-04, requested list from official in the Credentialing Department of DC Public Schools 202-442-5377) Received 8-10-04

Appendix C. 226 Bachelor's Degree Teacher Education Programs

That Prepare Early Childhood Teachers (0-6th grade)

***Alabama***
Auburn University
University of Alabama at Birmingham
Jacksonville State University
Samford University
Troy State University Dothan
University of Montevallo
*CUUP Institutions*
Alabama A&M University
Alabama State University
Miles College

***Alaska***
University of Alaska Anchorage

***Arkansas***
University of Arkansas at Little Rock
Arkansas State University
Harding University
John Brown University
Ouachita Baptist University
University of the Ozarks
*CUUP Institution*
University of Arkansas at Pine Bluff

***Colorado***
Colorado State University at Fort Collins
Metropolitan State College of Denver
Fort Lewis College

***Connecticut***
Central Connecticut State University
Southern Connecticut State University
Connecticut College
Mitchell College
Saint Joseph College
University of Hartford

***District of Columbia***
Catholic University of America
University of the District of Columbia
*CUUP Institutions*
Howard University
Gallaudet University

***Delaware***
University of Delaware

***Florida***
University of Florida
University of South Florida
Florida Southern College
Lynn University
University of North Florida
University of West Florida
*CUUP Institution*
Florida Agricultural & Mechanical University

***Georgia***
University of Georgia
Georgia State University
Georgia Southern University
Kennesaw State University
Reinhardt College
Toccoa Falls College
*CUUP Institutions*
Albany State University
Clark Atlanta University
Fort Valley State University
Spelman College

***Hawaii***
Chaminade University of Honolulu

***Idaho***
Idaho State University
University of Idaho

***Illinois***
University of Illinois at Urbana-Champaign
Northern Illinois University
Bradley University
Illinois State University
National-Lewis University
Northeastern Illinois University

***Indiana***
Indiana University
Ball State University
Indiana State University
Indiana University-Purdue University Fort Wayne
Purdue University
St Mary of the Woods College

***Iowa***
University of Iowa
Iowa State University
Graceland University
Loras College
Northwestern College

***Kansas***
Wichita State University
Washburn University
Bethel College
Southwestern College
Sterling College
Kansas Wesleyan University

***Louisiana***
Louisiana State University
University of Louisiana at Lafayette
Louisiana State University in Shreveport
Louisiana Tech University
McNeese State University
Southeastern Louisiana University
*CUUP Institutions*
Dillard University
Grambling State University
Xavier University of Louisiana

***Maine***
University of Maine at Farmington

***Maryland***
University of Maryland
Towson University
Hood College
Salisbury State University
University of Maryland Baltimore County
*CUUP Institutions*
Bowie State University
Coppin State College

***Michigan***
Michigan State University
Wayne State University
Central Michigan University
Hillsdale College
University of Michigan - Flint
Western Michigan University

***Minnesota***
Saint Cloud State University
University of Minnesota Duluth
Bethel College and Seminary
Metropolitan State University
Minnesota State University Moorhead
Southwest Minnesota State University

***Mississippi***
Belhaven College

***Missouri***
University of Missouri - Columbia
Southwest Missouri State University
Central Missouri State University
Missouri Western State College
Missouri Valley College
Webster University

***Montana***
Montana State University
University of Great Falls
University of Montana - Western

***Nebraska***
University of Nebraska at Lincoln
University of Nebraska at Omaha
Concordia University Nebraska
Doane College
Hastings College
Wayne State College

***Nevada***
University of Nevada, Reno

***New Hampshire***
Southern New Hampshire University
Keene State College
Plymouth State College

***Massachusetts***
Boston University
Boston College
Bridgewater State College
Endicott College
Wheelock College

***New Jersey***
Kean University
Montclair State University
Bloomfield College
College of St. Elizabeth
William Patterson
Seton Hall University

***New Mexico***
University of New Mexico
New Mexico State University
Eastern New Mexico University
New Mexico Highlands University

***New York***
New York University
Buffalo State College
Mercy College
State University of New York College at Brockport
State University of New York College at Geneseo

Yeshiva University

*CUUP Institutions*
Lehman College

***North Dakota***
University of Mary
University of North Dakota

***Ohio***
Kent State University
University of Cincinnati
Bluffton College
Marietta College
Ursuline College
Xavier University

***Oklahoma***
University of Oklahoma
Oklahoma State University
Oklahoma Baptist University
Southern Nazarene University
University of Central Oklahoma
University of Science and Arts of Oklahoma
*CUUP Institutions*
Langston University

***Oregon***
Oregon State University
Pacific University
Cascade College
Linfield College
University of Portland
Western Oregon University

***Pennsylvania***
Pennsylvania State University
Temple University
Carlow College
Elizabethtown College
Gannon University
Saint Vincent College
*CUUP Institutions*
Cheyney University of Pennsylvania
Lincoln University of the Commonwealth of Pennsylvania

***Rhode Island***
**Rhode Island**
Rhode Island College
Salve Regina University

***South Carolina***
University of South Carolina
Clemson University
Charleston Southern University
Columbia College
University of South Carolina Aiken
College of Charleston
*CUUP Institutions*
Benedict College
Claflin University

***South Dakota***
South Dakota State University
University of South Dakota
Black Hills State University
*CUUP Institutions*
Sinte Gleska University

***Tennessee***
University of Tennessee
University of Memphis
Milligan College
Tusculum College
Union University
East Tennessee State University
*CUUP Institutions*
LeMoyne-Owen College

***Texas***
University of Texas
Abilene Christian University
University of Texas at El Paso

***Utah***
University of Utah
Utah State University
Utah Valley State College
Weber State University

***Vermont***
University of Vermont
Lyndon State College
College of Saint Joseph
Bennington College
Goddard College

***Virginia***
James Madison University
Radford University
Eastern Mennonite University
Marymount University
Mary Baldwin College
*CUUP Institutions*
Virginia State University
Virginia Union University

***Washington***
Washington State University
Western Washington University
Central Washington University
Eastern Washington University
Saint Martin's College

***Wisconsin***
University of Wisconsin-Madison
University of Wisconsin-Milwaukee
Carroll College
Edgewood College
Saint Norbert College
University of Wisconsin-Stout

***Wyoming***
University of Wyoming

## Appendix D. Twenty-four Categories of Data Gathered on 226 Bachelor's Degree Early Childhood Teacher Education Programs

1. School name, state (e.g., university of Idaho, Idaho);
2. Student population (coded as either an institution with a student body $\leq$9000 or $\geq$9001 students);
3. Institution historically educates underserved student population, e.g., Gallaudet University, and members of or institutions identified by the united Negro college fund, national association of state universities and land-grant colleges, the tribal college journal, the Hispanic association of colleges and universities (2 coding categories - yes or no);
4. NCATE accreditation (2 coding categories - yes or no);
5. Early childhood concentration or specialization. Institutions that offered several concentrations were coded for all programs offered. (4 coding categories: 1) early childhood, 2) early childhood bilingual/English as a second language, 3) early childhood special education, 4) blended early childhood and special education)
6. Degree granted and major (e.g., Bachelor of Science in early childhood education; Bachelor of Arts in early childhood education; Bachelor of Science in early childhood development and education).
7. School or department in which degree program is housed (e.g., school of education, college of arts and sciences, college of education and health service, division of teaching, learning, and leadership);
8. State certification grade/age span (e.g., Pre-K - 3rd grade, birth – 2nd grade);
9. Age span of children the degree program prepares students to teach (e.g., Pre-K – 3rd grade, birth - 2nd grade);
10. Endorsement grade/age span (e.g., Pre-K – 3rd grade);
11. Teacher training program has a program review which is a brief statement outlining the mission and/or values of the early childhood or the general teacher education program (coded yes or no);
12. Diversity content in program review (coded for 11 diversity categories; each category coded only once; 11 is the maximum code tally per program review);
13. Required general education and professional education semester hours for completion of degree program (e.g., 128 semester hours);
14. Required general education semester hours;
15. Required professional semester hours;
16. Required special education semester hours;
17. Semester hours of explicit diversity course work (title explicitly indicates that the course addresses a category of diversity);
18. Explicit diversity course work (coded for 11 diversity categories; each category coded only once);
19. Semester hours of embedded diversity course work (title does not indicate that the course addresses a category of diversity, but diversity categories are embedded in the course description);
20. Embedded diversity course work coded for 11 diversity categories;
21. Course titles of explicit and embedded diversity courses;
22. Required diversity internship (2 coding categories - yes or no);
23. Required atypical/special education internship (2 coding categories - yes or no);
24. General education requirement of a foreign language (2 coding categories - yes or no).