

EDUCATING PRESCHOOL TEACHERS: MAPPING THE TEACHER PREPARATION AND  
PROFESSIONAL DEVELOPMENT SYSTEM IN NEW JERSEY

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## EXECUTIVE SUMMARY

This report maps the system of preschool teacher preparation and professional development in the state of New Jersey. The main purposes of this study were to: 1.) examine the capacity of the system to meet the ongoing demand for preschool teachers, 2.) to document the content of teacher preparation programs and professional development workshops, and 3.) to identify the gaps that exist between what standards recommend preschool teachers need to know and be able to do and the programs available to teachers in New Jersey.

One hundred and sixteen representatives from the 140 agencies and institutions that provide preschool teacher training were included in this study. The sample consisted of 12 representatives from four-year colleges, 17 representatives from community colleges, 29 representatives from Abbott districts, 42 representatives from non-Abbott Early Childhood Program Aid (ECPA) districts, and 17 representatives from resource and referral agencies. The representatives were interviewed in 2003-2004. Interview protocols focused on the content of training offered, the current capacity of institutions, and outreach and partnerships that had been developed with other agencies.

### Findings

#### *Capacity and Content of Four-Year Colleges and Universities:*

- Approximately 2,600 students are enrolled in approved P-3 certification programs. 58% of these students are enrolled in traditional 4-year undergraduate certification programs, 24% are in an approved alternate route program, and the remaining students are enrolled in various post-baccalaureate programs including endorsement programs.
- 162 faculty members teach in early childhood programs in these universities- 75 are full-time faculty (half of which are tenured) and 87 are part-time and adjunct faculty.
- The mean ratio of full-time faculty to student is 1:43, with variation across institutions from 1:2 to 1:156.
- 61 of the full-time faculty members are white, 8 are African-American, five are Asian-American and one is Latina. Five of the 12 schools have entirely white early childhood faculty.
- 75% of the early childhood faculty has a degree in early childhood or a related field (child development or another degree that specifically covers children younger than kindergarten age) and 85% have had direct employment experience with three and four year olds.
- Students currently in P-3 preparation programs at 2- or 4-year colleges are more likely to receive stand alone coursework in child development, curriculum, and literacy than in other content areas or diversity issues.
  - Almost 90% of programs devote an entire class to curriculum development.
  - Almost 80% of the programs offer literacy as a stand alone class, while some do not include social studies, math, music and art in any of the coursework.
  - 38% of the programs require students to take an entire class on working with children with special needs, while three programs do not address this topic at all.
- Students in alternate route programs are less likely to receive coursework in the areas of math ( $p < .05$ ), play ( $p < .05$ ), and early childhood assessment methods ( $p < .05$ ).

### *Capacity and Content at Two-Year Community Colleges*

- Approximately 3,200 students are enrolled in early childhood programs at community colleges.
- There are 105 early childhood faculty members- 34 full-time (60% tenured) and 71 part-time faculty.
- The mean ratio of students to faculty is 1:35, varying from 1:11 to 1:225.
- 81 faculty are White, 11 are African American, three are Latina, and 1 is Asian/Pacific Islander, 9 are unknown.
- Half of the schools (16 of 17 responded to this question) have all-white faculties
- 75% of the early childhood faculty has a degree in Early Childhood or a related field and 69% have experience working with children ages 3-4 years.
- Between 80 and 90% offer philosophical foundations, curriculum development, play, DAP, and classroom management as part or all of a required class.
- Literacy, art, and music/movement are all offered as a stand-alone class in over 50% of the community colleges.
- Over 50% of the colleges have an entire course devoted to working with young children with special needs, while only 12% devote a full class to working with children from diverse cultures and 6% devote a full class to issues of ELL.
- Community colleges that offer an Associates of Applied Science in early childhood (a non-transferable degree) are more likely to offer coursework in the areas of curriculum development, literacy, math, science, art, foundations and working with children with special needs than were schools with just an AA degree.

### *Capacity and Content of Agencies that Provide Professional Development*

#### Abbott and non-Abbott Early Childhood Program Aid (ECPA) districts

- The 71 districts participating in this study offer a total of 1,127 workshops with more than 12,500 teachers attending during the 2003-2004.
- 50% of workshop trainers have a degree specializing in early childhood or a related field and 70% have had direct employment experience working with 3-and 4-year-old children.
- 40% of workshops offered by districts are related to early childhood curriculum while only 10% address diversity topics including multiculturalism, ELL, and working with children with special needs.
- Abbott districts are more likely than non-Abbott ECPA districts (significant at the  $p < .05$  level) to offer workshops in assessment, setting up the classroom environment, child development, behavior management, DAP, working with children with special needs, and health and safety issues.

#### Resource and Referral Agencies (R&R)

- The 17 R&Rs offered 984 workshops this past year with a total of 3970 participants.
- Of the 159 workshop instructors employed at R&Rs, 64% have a degree in early childhood or a related field and 78% have experience working with 3-and 4-year-olds.
- 100% of R&Rs offer training in behavior management, curriculum, and working with families and over 80% offer training in diversity, working with children with special needs.

## Community Colleges

- 8 of the 17 community colleges offer not-for-credit workshops and trainings for preschool teachers.
- 115 workshops were offered at these community colleges last year with a total of 1,480 people attending.
- 90% of the 69 workshop instructors at community colleges have a degree in early childhood education or a related field and all have experience working with 3- and 4-year-old children.
- The highest proportion of workshops are offered in the area of curriculum practice and the fewest addressed diversity issues.

## *Outreach and Partnerships*

### For-Credit Partnerships

- 11 of the 2- and 4-year colleges are in partnerships with other agencies. Of these partnerships, 8 community colleges have articulation agreements with 4-year universities enabling students to count some of their early childhood coursework towards P-3 certification.
- Half of the 4-year colleges and universities reported partnering with (9) districts and (2) R&Rs.
- 5 community colleges offer for-credit coursework at a local district or R&R.

### Not for Credit Partnerships

- 2 universities reported partnering with other 4-year universities to provide conferences and workshops.
- 22 districts reported working with a local consortium to provide professional development for their preschool teachers.
- 11 school districts collaborate with other districts to provide professional development.

## Recommendations

As the findings from this study attest there is a wide range of training and certification programs available in this state should a preschool teacher want to both obtain a teaching credential and improve their expertise. However, the two components of teacher education, teacher preparation and professional development, continue to work primarily in isolation from one another and as a consequence, opportunities for effective and long lasting improvement in educational practice are being minimized. With the aim of forging further partnerships and linkages within and across programs and agencies we make the following recommendations:

### Teacher Preparation Programs

- Two- and four-year colleges should create an agreed upon standard for student: faculty ratios to ensure adequate advisement about programs and coursework.
- To ensure that teachers are being prepared in up to date knowledge about addressing the diverse needs of student learners and creating rigorous, developmentally appropriate curriculum that enables all children to learn across the content areas, 2- and 4-year colleges should engage in a self study or audit of the content of coursework.
- Two- and four-year colleges should examine the qualifications and expertise of faculty

regarding diversity issues and take steps to ensure those faculties improve their knowledge and skills in these areas.

- The Commission on Higher Education should bring together the Deans of the 2- and 4-year colleges on a regular basis to discuss variability within the current system, and to develop agreed upon principles for hiring and training of faculty and staffing programs.

#### Ongoing Professional Development

- The state Department of Education (DOE) should assess whether districts have the administrative resources that they need to ensure that their preschool teachers receive appropriate training opportunities.
- The state DOE should require non-Abbott ECPA districts to follow the same guidelines for professional development as Abbott districts and should provide adequate resources to do so.
- School districts, R&Rs, and community colleges should build more effective partnerships to increase collaboration and reduce duplication in providing ongoing professional development to preschool teachers.

#### Towards Creating a Coordinated System

While there are valuable partnerships occurring across institutions, for the most part they appear to be ad hoc and individually created leaving those teaching in smaller districts and further from colleges and universities at a disadvantage. To ensure consistency and continuity in the development of the preschool teacher workforce, New Jersey must now target its financial and human resources to the development of a more coordinated system of teacher preparation and professional development. Currently there is no committee or agency charged with the responsibility of overseeing both professional development and teacher education for a specific sector. This coordination is particularly critical in preschool education because the workforce is extraordinarily diverse in qualifications, knowledge, and level of experience and is located in a range of settings that have historically been regulated differently. It is therefore recommended that a state level coordinating agency be developed in conjunction with the Professional Development Center, the Department of Education, The Department of Human Services and the Commission for Higher Education.

## INTRODUCTION

Qualified teachers with a Bachelor's degree and specialized training in early childhood education have been identified as essential to children receiving a high quality preschool education (Barnett, 2003; Whitebook, 2003). Teachers with this kind of training tend to work with their students in developmentally appropriate ways that help children to build on their emerging understandings and skills (Helburn, 1995; Howes, Whitebook, & Phillips, 1992; Kontos & Wilcox-Herzog, 1997). Moreover, qualified teachers provide direction that follows on from what children are already engaged in, or introduces uninvolved children to new activities, so that children spend less time in repetitive or low-level activities (de Kruif, McWilliam, & Ridley, 2000). Consequently, children who are educated by qualified teachers have been found to be more sociable, exhibit a more developed use of language, and perform at a higher level on cognitive tasks (Bowman, Donovan, & Burns, 2001; Dwyer, Chait, & McKee, 2000; Howes, 1997).

As publicly funded preschool programs expand across the United States with the expectation that they will improve children's academic success, the demand for qualified preschool teachers is increasing. Meeting this demand is a challenge given that there is no agreed upon baseline of education for preschool teachers. Whereas kindergarten teachers are expected to have a minimum of a BA and a teaching certificate, only 18 states require that teachers in private early childhood settings undergo any preservice training (Ackerman, 2004). One consequence of these varying regulations is that nationally representative studies of the workforce estimate that only 50% of the approximately 284,277 preschool teachers have a Bachelor's degree of some kind (Saluja, Early, & Clifford, 2002). As a result, the educational backgrounds of teachers currently in the workforce ranges from those with a high school diploma to those with a



Bachelor's degree or higher. Moreover, even those teachers who have a Bachelor's degree do not necessarily have the specialized training that the research base argues is critical to being a knowledgeable professional (Saluja, Early, & Clifford, 2002). Therefore to meet the demand for qualified preschool teachers, it would seem sensible to focus not only on the recruitment and preparation of preservice teachers, but also to increase the credentials and knowledge base of those already in the field.

Creating a qualified and knowledgeable workforce is no easy task. The training of early childhood teachers is the province of multiple agencies and institutions, including universities, community colleges, resource and referral agencies, and professional organizations offering conferences, and individual consultants, and all tending to work independently of one another. Although the domain of certification programs has been 4-year institutions, the one study available indicates that the current system of early childhood teacher preparation is woefully under-resourced, and lacks the necessary infrastructure to train the large numbers of teachers, many of whom are non traditional students, to meet current demand (Early & Winton, 2001). At the same time the literature on quality teaching, in general, argues strongly that a teaching credential is one step in becoming a highly skilled teacher and improved instruction is also dependent on teachers receiving ongoing professional development. Therefore if a qualified preschool teaching workforce is to be developed, it is necessary that the resources currently located in separate agencies and institutions come together in some kind of coordinated system that can support experienced teachers with minimal education to upgrade their credentials while simultaneously building on the expertise of those already certified.

States and policymakers attempting such reform not only face significant challenges in trying to bring the system together, but there is little research available that might inform such

efforts. Early childhood teacher preparation and professional development are under-researched areas and examinations of the relationship between these two forms of training are non-existent. This report documents a study of New Jersey's efforts to create a new system of early childhood teacher development to produce certified preschool teachers in a relatively short amount of time.

## BACKGROUND OF THE STUDY

New Jersey provides a unique context from which to examine the professional preparation and development of preschool teachers. Through legislation adopted in 1996, state funded preschool and full-day kindergarten was mandated for 132 low-income school districts in New Jersey. N.J.S.A. 18:7F. These districts include the 30 highest poverty districts, known as *Abbott* districts, as well as an additional 102 districts with high concentrations of low-income students also known as non-Abbott Early Childhood Program Aid (ECPA) districts.

The *Abbott* districts were required by the New Jersey Supreme Court to create systems of high quality preschool for all 3- and 4-year-old children beginning in the 1999-2000 school year. The *Abbott* classrooms were to have a class size of no more than 15 students with a certified teacher and teacher assistant per classroom. In addition, each program was required to use a developmentally appropriate curriculum linked to the state's core curriculum content standards, and provide adequate facilities, special education, bilingual education, transportation, health, and other services as needed (*Abbott v. Burke*, 1998).

In an effort to enroll all eligible children in full-day, full year preschool programs, school districts were required, when feasible, to collaborate with existing Head Start and private child care programs already offering preschool in their communities. In addition, to facilitate the implementation of developmentally appropriate curriculum, the Court recommended several empirically validated early childhood curriculum models. School districts created the leadership

position of teacher consultant- or master teacher- to provide technical assistance, professional development and mentoring to preschool teachers in implementing these curriculums.

Further, the New Jersey Supreme Court mandated in the *Abbott VI* decision that all teachers in *Abbott* preschools --unless they already held the Nursery or Kindergarten through Grade 8 certificate and had two years of experience working with preschool aged children-- must obtain a minimum of a BA with Preschool- Grade 3 (P-3) certification by September 2004 (*Abbott v. Burke*, 2000). In response to this mandate, New Jersey's institutions of higher education created specialized P-3 certification programs, utilizing both alternate route and traditional approaches to teacher preparation. Several funding (Quality and Capacity grants, Teacher Effectiveness and Teacher Preparation grants) sources were also provided by the State Government through the Commission for Higher Education to help institutions of higher education expand their early childhood faculties. Moreover, a state- funded scholarship program was also initiated to pay for teachers' tuition as they upgraded their qualifications.

Non- *Abbott* ECPA districts were expected to establish their preschool programs for 4-year old children by the 2001-2002 school year. In the years leading to 2001, non- *Abbott* ECPA districts were to use their state aid to create "educationally meritorious" early childhood programs, as well as assure that they had adequate facilities and space to house these programs (N.J.A.C. 6A:23-5.4).

There are many critical differences between the preschool programs in the *Abbott* and non-*Abbott* ECPA districts. While non-*Abbott* ECPA districts were also to use a developmentally appropriate curriculum based on the state standards of quality, they were not required to use a nationally recognized curriculum. There was no maximum class size requirement and, while preschool teachers in these districts were required to be certified, they

were not required to hold the P-3 certification. Further, collaboration between school districts and community-based programs has not been as prevalent in these districts partially because of the vagueness of the legislation and regulations.

## METHODOLOGY

Three purposes guided the design of this study. First, we sought to map the current system of early childhood teacher preparation and professional development in the state of New Jersey so that it was possible to determine the agencies offering training, and the kinds of programs of professional development and teacher certification available to preschool teachers at various institutions. A second purpose of the study was to examine the current capacity of this system to meet the demand for early childhood teachers. Here we were interested in identifying additional resources, and policy supports that might be needed to create a more coordinated system of teacher development. Third, we examined the content of the coursework and workshops currently available to preschool teachers to identify any gaps that exist between what standards recommend preschool teachers need to know and be able to do and the programs available to teachers in New Jersey.

### Sample

The sample for this study consists of 116 representatives from the total population of 140 agencies and institutions that provide early childhood teacher preparation and/or professional development in the state of New Jersey (see Table 1). The sample was obtained in several steps. First, we identified four types of organizations that provide teacher training and/or professional development in New Jersey. We then attempted to contact the individual responsible for early childhood programming at each of these 188 institutions. In doing so we discovered that 48 of them did not provide preschool teacher training. We then proceeded to make contact with a

representative of the remaining 140 agencies/institutions to participate in a telephone interview. Of the 140 identified programs, 116 agreed to participate. The main reasons for institutions not participating was either lack of time, or an inability to find a contact person. Therefore 83% of all institutions offering preschool teacher training in the State of New Jersey formed the final sample for this study.

Table 1: Sample

	Total Population	Number Offering Preschool Teacher Training	Number Institutions Participating
4 -Year Colleges	21	14	12
Community Colleges	19	18	17
Abbott Districts	30	30	29
ECPA Districts	102*	60	42
Resource & Referral Agencies	18	18	17
Total	188	140	116

\*Please note that we were unable to contact 14 ECPA districts and therefore do not know whether they provide professional development for preschool teachers.

### Data Collection

The authors, in consultation with experts in the field, developed the protocols used to structure the telephone interviews. Each protocol was field tested with key informants who had knowledge of the particular training institutions. These individuals were not included in the final sample. Utilizing the work of Early and Winton (2001), Horm-Wingerd, Hyson, and Karp (2000), and Isenberg (2000), the protocols focused on the content of training offered, the current capacity of institutions, and outreach and partnerships that had been developed with other agencies. In addition, the protocols elicited basic contact and program information that could be

used to develop an online directory of early childhood professional development and teacher preparation options.

All participants were interviewed via telephone during the 2003-2004 school year. Prior to the interview each participant received a list of information that they would need to have available to them to answer the questions. Each interview was between 30-60 minutes long and was conducted by a member of the research team. When a participant was unable to answer a question due to a lack of information, a follow-up call was made at a later date to complete the interview. During the interviews, all responses were recorded manually on a recording form and then were entered into an SPSS database.

#### Data Analysis

The data analysis plan followed a three-step plan. First, descriptive statistics were conducted to provide a portrait of each kind of training institution in terms of capacity, programs offered, content of trainings, and outreach and partnerships. The data sets pertaining to teacher preparation (2- and 4-year colleges/universities) and professional development (districts and resource and referral agencies) were then examined separately. Second, using inferential statistics (e.g. exact tests), the relationships between various institutional characteristics and the content being offered to preschool teachers were examined. Finally, wherever applicable, comparisons were made across institutions.

#### MAPPING THE SYSTEM OF PRESCHOOL TEACHER TRAINING IN NEW JERSEY

As mentioned previously, the system of training and professional education for teachers is comprised of two sectors. The first is teacher preparation that is provided through the states 2- and 4-year institutions of higher education. The second is that of professional development provided by school districts, resource and referral agencies, and community colleges to teachers

of various levels of education and experience through workshops, conferences and the like. In this next section we examine the findings pertaining to each of these sectors. To provide the reader with some context, before each set of findings is presented, we briefly review what is known about effective professional development or teacher preparation. Recommendations relating to each sector follow the findings. These sets of findings are then examined together to draw recommendations for policy and practice.

### Early Childhood Teacher Education

Policy recommendations for the preparation of early childhood teachers (see, e.g. Hyson, 2003; Katz & Goffin, 1990; McCarthy, 1990; Saracho and Spodek, 1983; Spodek and Saracho, 1990) emphasize three coursework components: general education, professional foundations, and instructional knowledge. The general education requirement reflects the belief that teachers should acquire a broad knowledge base within various disciplines, including those found in both the sciences and the humanities. Reflecting common sense and research-based evidence that early childhood education and child development coursework also predicts positive interactions between teachers and their young students (Honig & Hirallel, 1998), preparation programs should provide students with a foundation in early childhood educational topics. These topics include child development and learning theory, as well as methods courses in both pedagogy and curricular approaches.

At this point in time, preschool teachers also have to respond to a range of curricular initiatives that various consortia, professional organizations, and states are developing. These initiatives have established outcome standards for preschoolers, particularly in the area of language and literacy (Burns, Midgette, Leong, & Bedrova, 2003). In addition to a general knowledge of teaching content therefore, preschool teachers also need to know the relevant

standards and be able to show evidence of student learning. Not many of these standards have considered the needs of diverse learners (Scott-Little, Kagan, & Frelow, 2003), however, and when coupled with the different settings in which preschool teachers work, a “one-size-fits-all” approach to teacher preparation programs can be problematic (Isenberg, 2001; Katz & Goffin, 1990; Spodek and Saracho, 1990).

Thus in order to realize the kind of teaching practices and interactions among teachers and children that positively effect children’s development and learning, teacher preparation programs should prepare teachers to understand how to apply this knowledge in specific program planning and in assessing and adapting instruction to meet the needs of individual children, especially those from “diverse linguistic and cultural backgrounds” (Bredekamp, 1996, p. 339). The current standards for early childhood teacher preparation advocated by the National Association for the Education of Young Children (NAEYC) (Hyson, 2003) thus recommend that teachers participate in field experiences (observations, practica, and student teaching) where they can practice what they have learned (Hyson, 2003).

Despite these standards and specific policy reports that address what preschool teachers need to know, there is little research available on what actually takes place within programs of preschool teacher preparation and their effect on teaching and learning. A small group of studies finds a correlation between coursework in early childhood and the developmental appropriateness of classroom practices (Cassidy, Buell, Pugh-Hoese, & Russell, 1995; File & Gullo, 2002; McMullen, 1998; 1999; 2003; Smith, 1997; Vartuli, 1999). Yet, some key reports (Bowman, Donovan, & Burns, 2001; Stott & Bowman, 1996) express concern that teacher preparation programs often convey outdated child development knowledge that leads to simplistic conceptions of young children’s capacities and educational needs, as well as what it



means to enact developmentally appropriate practice. The one nationally representative study of 2- and 4-year institutions of higher education (Early & Winton, 2001) found that most teacher education programs currently in operation offer little, if any, coursework in linguistic and cultural diversity and the education of children with disabilities. Further, Isenberg (2000) contends that early childhood teachers traditionally have not been prepared to teach domain-specific knowledge to young children, even though content standards in math, literacy, and science exist for 4-year-olds. Thus, there appears to be a potential gap between professional standards and the content teachers are learning in their programs of preparation.

Refocusing the content of teacher education and professional development programs so that it reflects an up-to-date knowledge needed for the current social, political, and economic context also means that many faculty and teacher educators will need to improve their own understandings of the field. As Horn-Wingerd, Hyson, and Karp (2000) note, “retooling faculty” in new areas of knowledge and skills is necessary if professional development is to be relevant. What little research is available would suggest that most faculties of teacher education do not have the capacity to meet this expectation. Despite the growing need to prepare early childhood teachers to work with young children from diverse cultural and linguistic backgrounds, the faculties of early childhood education remain overwhelmingly White (Early & Winton, 2001). Research into teacher education programs has demonstrated that intensive and personal interactions between faculty and students are a critical piece of becoming an early childhood teacher (Darling-Hammond, 2000). However, early childhood departments have a disproportionate number of part-time and adjunct faculty members, and as a result the student to full-time faculty ratio is 61 to 1 as opposed to 39 to 1 in higher education overall (Early & Winton, 2000).

Given this research base, we asked 2- and 4-year colleges a series of questions that addressed both capacity and the content of their programs. We begin with the 4-year colleges and universities offering P-3 certification programs.

### *Capacity and Content of 4-Year Colleges and Universities*

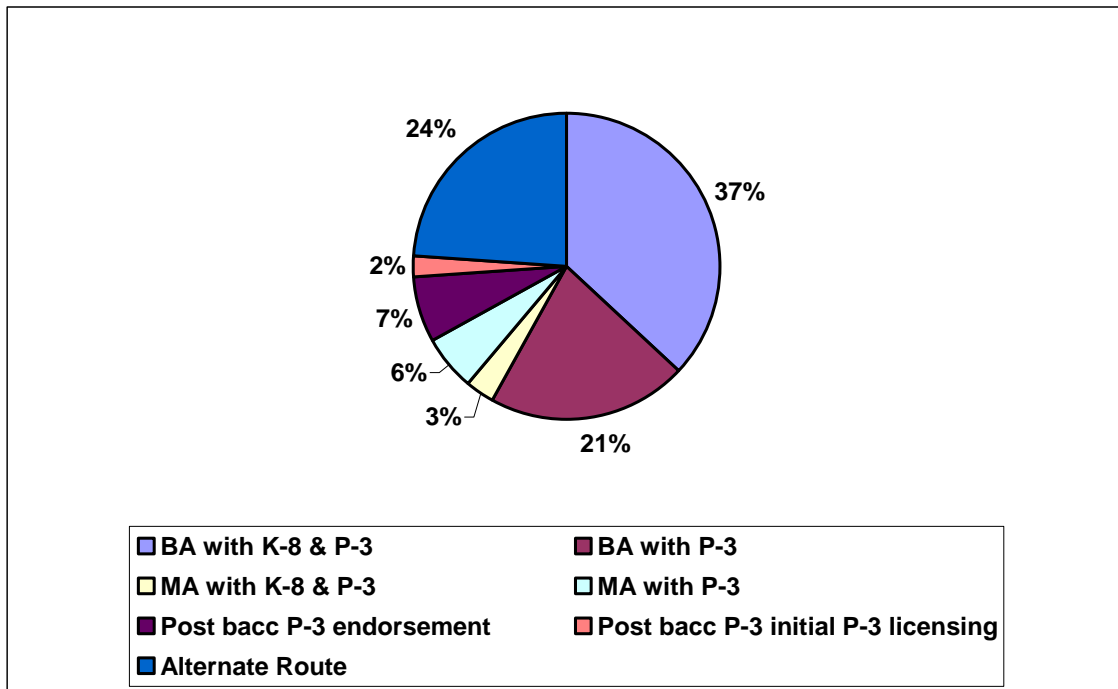
There are two pathways to teacher certification in New Jersey. The first of these is the traditional route of preparation, resulting in a BA or Master's degree and certification. Most of the BA-level programs involve 30 credits each in both an academic major and educational methodology courses, as well as approximately 60 credits of general education. The 30 credit hours are to include study of behavioral/social sciences, the teaching of literacy and numeracy, and the educating special needs and linguistically diverse students and should be aligned with the Professional Standards for Teachers (N.J.A.C. 6A:9-10.2).

Traditional teacher education students also participate in observational field experiences and semester-long student teaching internships. All of the 14 colleges and universities offer a traditional route program leading to a P-3 credential. The majority of these schools have chosen to develop programs that lead to a dual K-8/P-3 teaching certificate and prepare graduates to work in either an elementary or a preschool program. One school only offers a P-3 endorsement program that allows holders of other teaching certificates (i.e. K-8 certificate) to take a set of courses that will allow them to teach in an Abbott preschool.

New Jersey has also had alternate route certification since 1985, and a specialized P-3 alternate route program since 2001. In the P-3 alternate route program, teachers who are already employed as a preschool teacher in an *Abbott* district must enroll in for-credit coursework in P-3 pedagogy in a state approved alternate route program. They also receive 34 weeks of mentoring. Seven schools offer alternate route P-3 programs in addition to a traditional route program.

As mentioned previously, we interviewed a representative from 12 of the 14 institutions offering P-3 coursework in New Jersey. Therefore, unless otherwise indicated, the following statistics reflect what is occurring in the programs at the 12 schools. Figure 1 outlines the nine kinds of programs leading to P-3 certification and the percentage of students enrolled in each. At the time of our survey, there were approximately 2,600 students enrolled in approved P-3 certification programs. As can be seen, the majority of these students (58%) are enrolled in traditional 4-year undergraduate certification programs. An additional 24% who are employed in an Abbott preschool are enrolled in one of the seven state approved alternate route programs. The remaining students are enrolled in various post-baccalaureate programs that include endorsement programs for teachers who hold a non-preschool teaching certificate and pre-service certification programs.

Figure 1: Student enrollment in certification programs



### *Faculty*

There are 75 full-time faculty members employed at these 12 universities. All of these institutions offer tenure and close to 50% of full-time faculty are tenured. In addition to full-time faculty, there are 87 part-time and adjunct early childhood teacher educators making a total of 162 faculty members teaching in early childhood programs in these 12 institutions.

The mean ratio of full-time faculty to students is 1:43. However, across the twelve institutions there is significant variation ranging from one full-time faculty member per two students at the one institution that only offers an endorsement program to one faculty member to every 156 students at another.

Of the 75 full-time faculty members, sixty-one are White (81%), while only eight are African-American (11%), five are Asian-American (7%) and one is Latina (1%). The diversity of the faculty is slightly greater when the calculations include both part-time and adjunct faculty. However, five of the 12 schools have early childhood faculties that are entirely White.

The early childhood faculty in New Jersey's 4-year institutions of higher education is in many ways highly qualified to prepare early childhood teachers. All faculty members have a minimum of a Master's degree and 49% hold a doctorate. Seventy five percent of the early childhood faculty has a degree in early childhood or a related field and 82% have had direct employment experience with 3-and 4-year-olds.

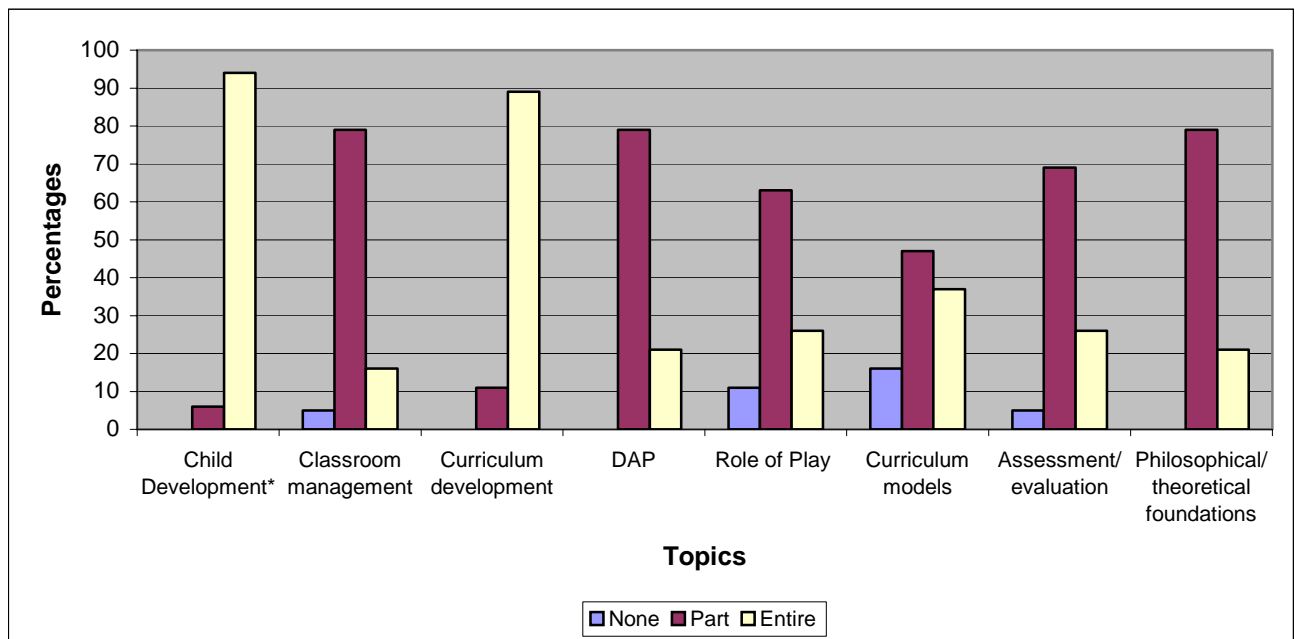
### *Content*

The research literature advocates three broad areas of knowledge --early childhood foundations, discipline specific curriculum content and working with families and diversity issues -- that preschool teachers need to know in order to teach young children effectively. Institutions were asked to identify from a list of topics the content of the coursework comprising

their P-3 programs in each of these areas and indicate whether the content comprised an entire required class, part of a required class, or was not required at all. Since seven institutions offer both a traditional and alternate route program, and these two routes have different requirements, the data presented below includes answers regarding all 19 programs.

Figure 2 provides information on coursework that is considered foundational to early childhood teaching—including child development, early childhood curriculum in general, and play. As can be seen, P-3 students in all but one program receive at least one entire course in child development. Almost 90% of programs devote an entire class to curriculum development. Philosophical foundations and developmentally appropriate practice are also well represented, with 100% of the programs offering these topics as either part or all of a required class. On the other hand, several programs do not cover play, assessment, classroom management or specific curriculum models at all.

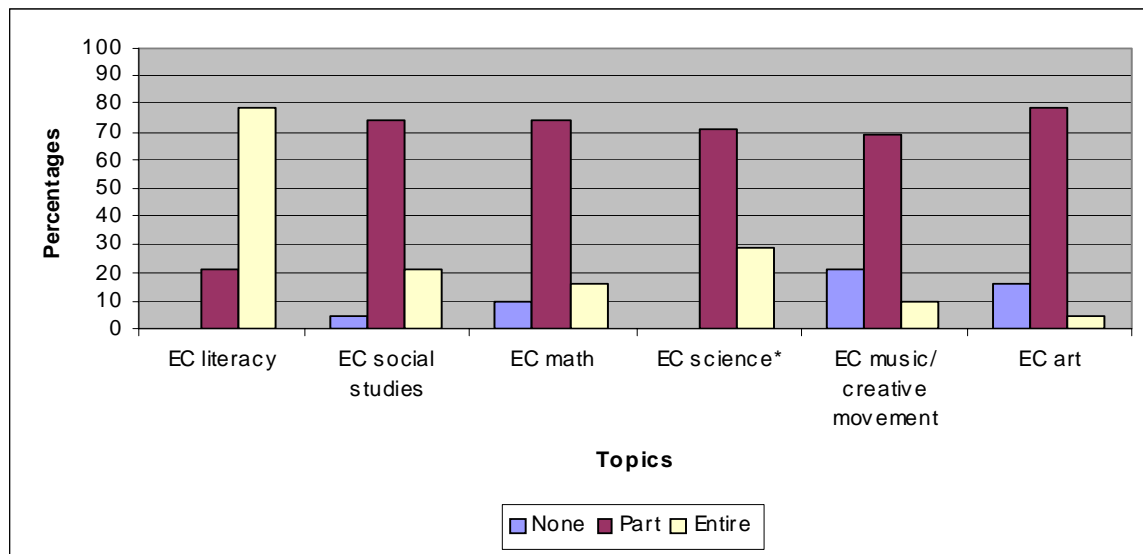
Figure 2: Early Childhood Foundations



\* 18 of 19 programs responded to this question

Increasingly preschool teachers are expected to scaffold children’s learning in domain specific knowledge and therefore should know the methodology and concepts appropriate for 3- and 4-year-old children. As can be seen in Figure 3, the majority of schools offer some coursework in all of the domains. Almost 80% of P-3 programs across the state offer literacy as a stand alone class. There are some students who receive no coursework in teaching social studies, math, music, and art.

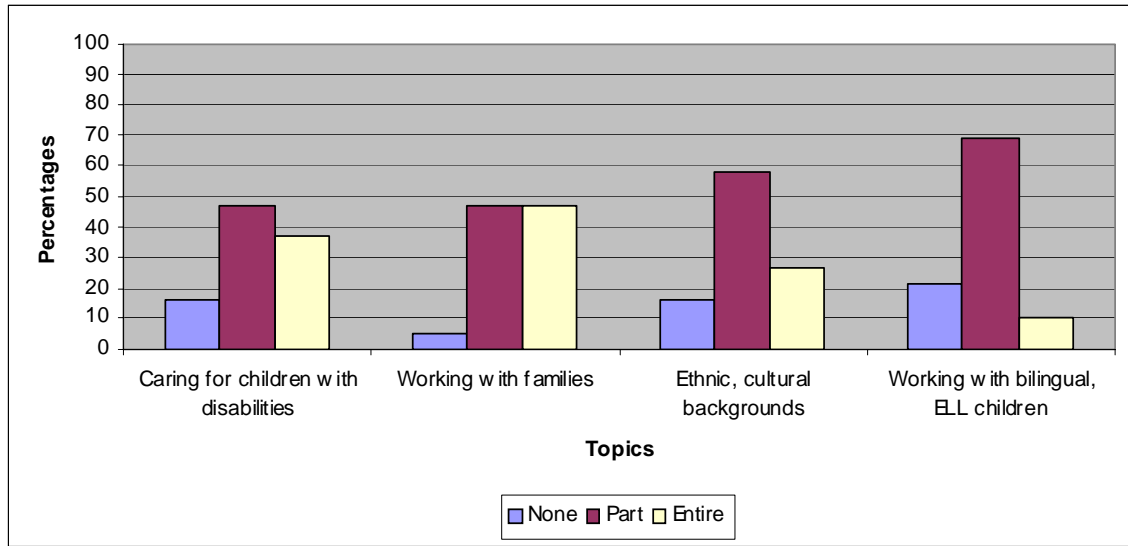
Figure 3: Specific Content Areas



\*Only seven of the universities were asked this question

Participants in the study were asked about coursework that focuses on diversity and prepares students to work with diverse populations (see Figure 4). While 38% of the programs require their students to take an entire class on working with children with special needs, three programs offer no coursework on this topic. Seventy percent of the programs offer some coursework on working with children for whom English is not their first language, but again, several programs do not address this topic at all. Finally, almost all of the programs (95%) provide some preparation on working with families.

Figure 4: Diversity



The colleges were asked whether there was a practicum experience connected to the coursework for particular topic areas. Only three topics—curriculum development, developmentally appropriate practice, and literacy—had a required practicum experience in over 50% of the schools. Alternatively, play, music, art, science, working with families and working with English language learners were connected to a practicum experience in less than 25% of the schools.

Finally, because of state requirements, all of the colleges and universities required a full-time student teaching placement in at least one early childhood setting for students enrolled in traditional route P-3 certification programs. A third of the schools indicated that students were placed in two settings as part of their student teaching experience. Field work supervisors at over three quarters of the colleges and universities have an early childhood background.

The content being offered across the 12 institutions was examined in relation to various institutional and programmatic characteristics. Significant differences were found for route of preparation in that students in alternate route programs are less likely to receive coursework in

the areas of math ( $p < .05$ ), play ( $p < .05$ ), and early childhood assessment methods ( $p < .05$ ). In addition, the number of P-3 programs an institution offers was found to have some bearing on the program content. Universities and colleges offering both stand alone and dual P-3/K-8 programs are less likely to have coursework in working with students from diverse backgrounds ( $p < .05$ ) and art and music ( $p < .05$ ).

### *Capacity and Content at 2-Year Community Colleges*

The traditional role of community colleges with regard to K-12 teacher education has been to offer the general education courses required for students planning to transfer into a certification program at a 4-year college or university. Community colleges have therefore offered only a few teacher preparation classes (Shkodriani, 2004). This however, has begun to change. With over 1,000 community colleges in the country and an identified teacher shortage (“Crossroad in Teacher Education”, 2001; Shkodriani, 2004), community colleges are beginning to be identified as a “part of the solution” in preparing qualified teachers, and are therefore exploring new and different roles in the teacher education.

Since the majority of preschool teachers were historically not required to have a BA, community colleges have been able to play a larger role in preschool teacher preparation than in the K-12 system. Community colleges offer both an Associate of Art (AA) transfer degree and a terminal Associates of Applied Science (AAS) degree for students planning to work in childcare.

The AAS degree focuses on the technical skills and knowledge needed to work with young children, but do not require that students take all of the general education coursework required for a BA. Teachers with an A.A.S. degree, however, do not meet the current accepted standards for a “highly qualified teacher,” which has been defined as holding a BA and state certification. Many federal and state funded preschool programs, including those in New Jersey,



now require their preschool teachers to be highly qualified. Therefore, the A.A.S is becoming a less feasible option for early childhood caregivers. The Associate of Arts (AA) degree with a specialization in early childhood is for students who are planning to attend a 4-year school to complete a BA and their P-3 teaching certification requirements. Students enrolled in the AA program tend to take their general education requirements at the community college level as most 4-year institutions will transfer only a minimal amount of education content coursework credits from community colleges.

Both types of degree programs are available in New Jersey. Thirteen of the 17 community colleges in our sample offer an A.A.S. degree and seven offer an AA degree. Three community colleges offer both types of degrees. Throughout this report we will use the term Associates to refer to both of these programs and AA or AAS to differentiate between the two degree programs.

At the time of this survey, approximately 3,200 students were enrolled early childhood programs in these community colleges. The number of students per college ranged from 27 to 700, with a mean of 186 students per school.

### *Faculty*

There are 34 full-time faculty teaching in these schools. Each of the fifteen schools responding to the question regarding tenure offer tenure and almost 60% of full-time faculty are tenured. There are an additional 71 part-time and adjunct faculty members teaching early childhood courses at these schools making a total of 105 early childhood faculty. When part-time faculty members are included, the mean ratio of students to faculty is 1:35. Similar to the 4-year institutions, there is a lot of variation in the ratio of faculty to student population across institutions. While one community college has a ratio of 1:225, the lowest ratio is one faculty

member to every 11 students.

Of the 105 full and part-time early childhood faculty at community colleges, we were able to ascertain the racial background of 96. Eighty-one are White (77%), eleven are African-American (10%), three are Latina (3%), and one is Asian/Pacific Islander (1%). Half of the 16 schools that responded to this question have all-White faculties. Of the remaining community colleges, five have at least one African-American faculty member.

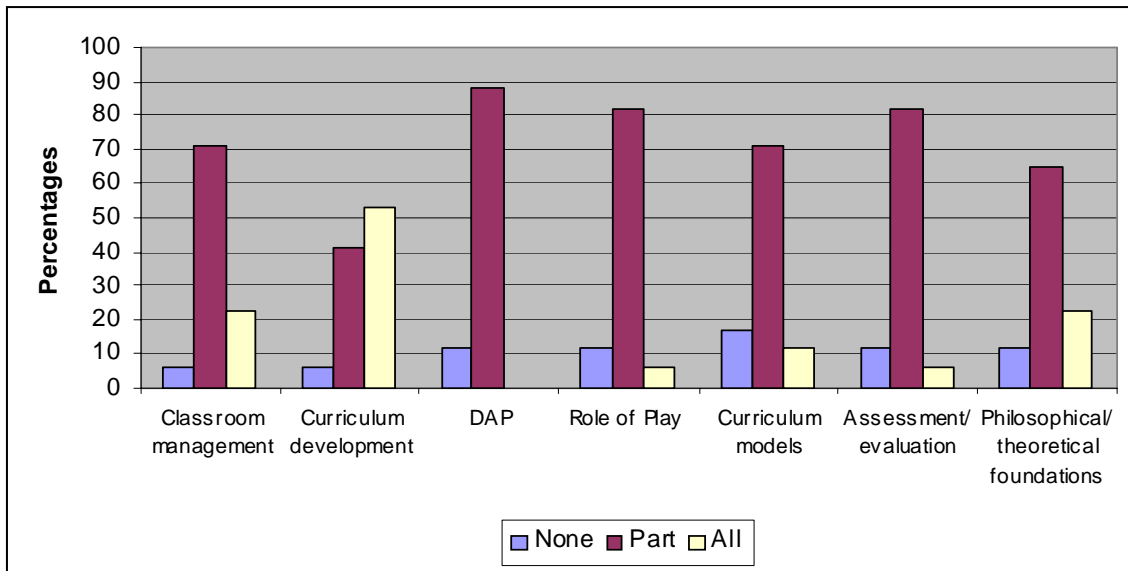
All of the faculty have a Master's degree or higher with 23% having completed a doctoral degree. Fifty seven percent of these degrees are in Early Childhood, Child Development or a degree that specifically covers children younger than kindergarten age. In addition, most of the faculty (69%) have experience working with children ages 3-4 years.

### *Content*

Interview participants were asked to provide information on the early childhood education coursework offered as part of their Associates programs. As with the 4-year participants, they were asked to indicate whether the topic was offered as an entire required class, part of a required class, or not required at all.

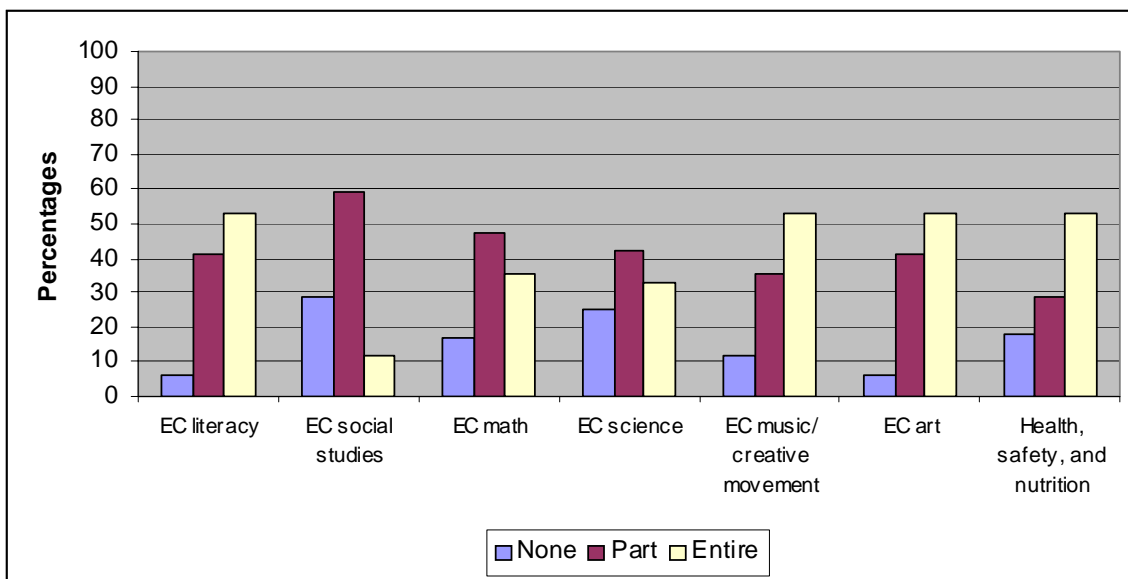
Figure 5 summarizes the percentage of community colleges offering coursework in different topics related to foundational knowledge. Between 80 - 90% of the schools offered philosophical foundations, curriculum development, play, DAP, and classroom management as part or all of a required class.

Figure 5: Foundational Coursework



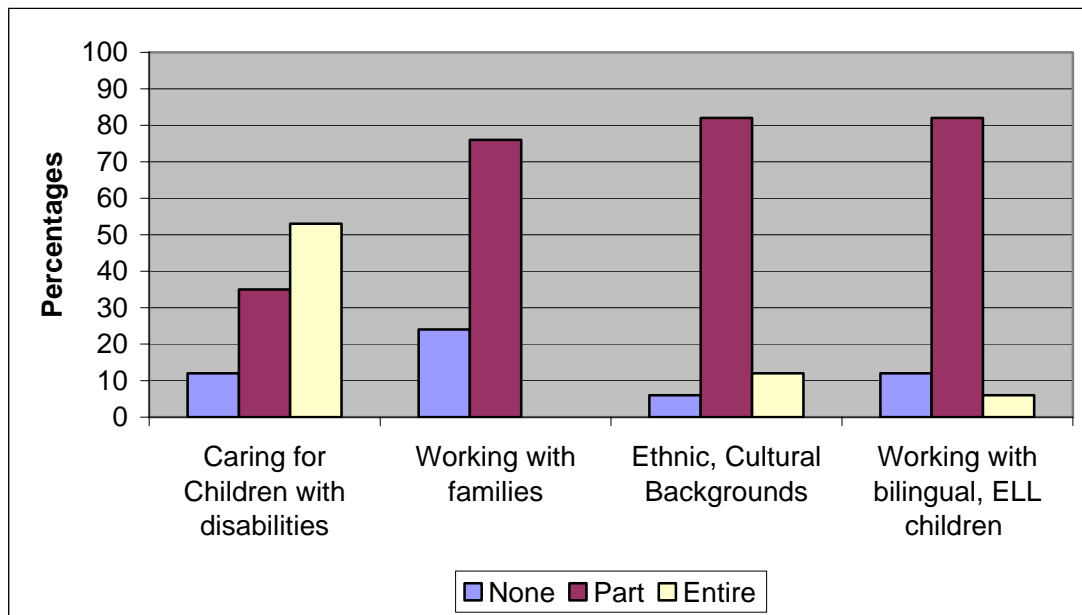
In terms of the specific content areas summarized in Figure 6—literacy, music/movement and art are all offered as a stand-alone class in over 50% of the community colleges. Conversely, approximately a quarter of the community colleges do not offer coursework in early childhood social studies or science and 18% do not offer early childhood math.

Figure 6: Content Areas



Overall, the community colleges appear to provide considerable content regarding diversity and addressing special needs populations (see Figure 7). Over 50% of the colleges have an entire course devoted to working with young children with special needs and an additional 35% teach about these issues as part of a required class. Only 12% of the schools devote a full class to working with children from diverse cultures and only 6% devote a full class to issues of ELL. Most community colleges (80%) address these topics as part of a required class. Finally, 23% of the schools do not provide coursework on working with families.

Figure 7: Diversity Coursework



Most of the content addressed in Associates programs was not connected to a practicum experience. However at least one third of community colleges required a practicum experience linked to classes in curriculum development, literacy, and classroom management. In contrast, just 6% of colleges offer any kind of practical experience in working with English Language Learners and just 12 % provide a practicum concerned with working with families.

The types of content received by students in 2-year colleges vary according to the size of

the institutions they attend, and the type of degree offered by those institutions. Schools were divided into three categories --large, medium, and small -- according to the number of students served. The largest schools, which have more than 200 students enrolled in early childhood programs, are least likely to offer an entire class in the content areas of literacy ( $p < .05$ ), math ( $p < .05$ ), science ( $p < .05$ ), music ( $p < .05$ ), and art ( $p < .05$ ). At the same time, it is only these large institutions that offer an entire class in bilingual education ( $p < .05$ ). Yet, ironically, the largest institutions are also least likely to offer an entire class in working with children with disabilities ( $p < .05$ ).

Institutions that offer only an AAS or both an AAS and AA degree in early childhood were more likely to offer coursework in the areas of curriculum development, literacy, math, science, art, foundations and working with children with special needs than were schools with just an AA degree. Furthermore, the schools that only offer an AAS degree are more likely to offer an entire class in each of these content areas. A similar pattern was found for field placements required of students in AA degrees. Of the seven community colleges that offer an AA, three expect students to complete less than 30 hours of fieldwork in a classroom of some kind. In contrast, of the 13 community colleges that offer an AAS, seven require that students complete between 51-100 hours of field placement to fulfill degree requirements, and six require over 100 hours.

### *Supports and Challenges in 2- and 4-Year Institutions*

*Student supports.* Many of the preschool teachers who are trying to upgrade their qualifications in response to the Abbott 2000 court decision are non-traditional students. In a recent study of this population, Ryan and Ackerman (2004) found that the average age of in-service teachers is 38 years old and most have been working in preschool for an average of nine

years. These students may require special supports to help them access and succeed in institutions of higher education.

While the research base indicates that 4-year institutions have been less than responsive to this population, we found that 10 of the 4-year colleges and universities did, in fact, offer support to their students who are enrolled in P-3 programs. Almost 60 percent of the schools offer classes on-site at local school districts, whereas only thirty-three percent offer classes at community-based childcare centers. Fifty five percent of universities offer classes at satellite facilities and 18% offer classes online. As many students currently enrolled in P-3 programs are already employed in preschools, seven of the 12 colleges and universities allow their students to complete all of their student teaching requirements at their place of employment. A quarter of the universities offer access to follow-up professionals, and more than half (60%) of the universities indicate offering mentoring assistance that is not related to coursework.

The community college participants were asked whether they offered coursework at satellite facilities or online. Nine reported that they offered coursework at satellite facilities and three offered courses online.

*Challenges.* National research suggests that most institutions of higher education do not have the infrastructure to adequately meet the demand for preschool teachers. As P-3 programs have expanded quickly to meet the requirements of Abbott, we asked a series of questions of both the 2- and 4-year institutions in order to determine the current gaps in the infrastructure. As can be seen in Table 2, the two largest challenges are having enough physical space to accommodate the number of students seeking coursework in early childhood and a lack of full-time faculty. There is also variation between the 2- and 4-year institutions in terms of institutional support. While half of 4-year colleges and universities considered this at least

somewhat of a challenge, 82% of 2-year institutions did not find this a challenge at all.

Table 2: Challenges to Institutions

Challenges	4-Year Institutions			2-Year Institutions		
	Large %	Some-what %	None %	Large %	Some-what %	None %
Lack of classroom space on campus	42	0	58	19	25	56
Lack of full-time EC faculty	33	25	42	25	25	50
Recruiting EC faculty	25	17	58	12	19	69
Quality of student teaching placements	25	33	42	19	12	69
Quantity of student teaching placements	8	0	92	19	12	69
Support from Institution	25	25	50	12	6	82

## Early Childhood Professional Development

The other side of the teacher training system is the professional development workshops, classes, and technical assistance that preschool teachers receive once they are already working in the field. Research shows that these short-term trainings can increase the skills and knowledge base of teachers, and can therefore lead to a more qualified and effective workforce (Cassidy, Hicks, Hall, Farran & Gray, 1998; Espinoza, Matthews, Thornburg & Ispa, 1999; Horm-Wingerd, Caruso, Gomes-Atwood & Golas, 1997; Rhodes & Hennessey, 2001).

In the field of early childhood, professional development is particularly critical, as opposed to K-12 teachers, preschool teachers do not all enter the profession with a baseline of a BA and specialized preparation in teaching young children. Professional development has the potential to fill in the knowledge and skills that many teachers may be lacking—for example knowledge about child development, practical skills in planning and implementing a developmentally appropriate curriculum, and how to work with diverse groupings of children and families (Cassidy, Hicks, Hall, Farran & Gray, 1998; Espinoza, Matthews, Thornburg & Ispa, 1999).

Although states generally require ECE teachers to attain a specific amount of annual training (Ackerman, 2004), merely attending workshops or classes in order to meet temporal goals does not guarantee that qualifications will improve or classroom practice will be positively impacted (Fullan, 1995; Guskey, 2000). If professional development is to be effective, it should be linked to teachers' experience levels, the current teaching and learning activities in their classrooms, and provide opportunities for continued learning through ongoing conversations and coaching (Bowman, Donovan, & Burns, 2001; Bransford, Brown, & Cocking, 2000; Darling-Hammond & McLaughlin, 1996; Little, 1993; National Commission on Teaching & America's



Future, 1996). Many teachers, however, are often left to rely on one-shot, disconnected workshops (Elmore, 2002; Hawley & Valli, 1999; Lewis et al., 1999; Loucks-Horsley, 1995; Miles, 1995; Parsad, Lewis, & Farris, 2001). These workshops also may not be context- or experience-specific, or provide teachers with any opportunity for ongoing feedback or reflection (Feiman-Nemser, 2001; Fullan, 1991; Little, 1993).

Admittedly, finding professional development that is experience-specific to individual teachers is problematic. As Bransford, Brown, and Cocking (2000) relate, K-12 teachers not only teach at different levels and in different settings, such as rural high schools or urban elementary schools, but may have attained degrees in different subjects and have widely varying amounts of teaching experience. The case is much the same for ECE teachers. Due to the differing licensure requirements to teach in ECE (Ackerman, 2004), it is not unusual to find teachers in these settings with a variety of educational backgrounds, including high school graduates, holders of the CDA credential, or those who have obtained varying amounts of college credits. As stated earlier, recent studies regarding the educational backgrounds of ECE teachers have estimated that only one-third (Burton, et al., 2002) to almost one-half (Saluja et al., 2002) of teachers in private ECE settings have a minimum of a BA. Professional development for these ECE teachers, then, not only encompasses multiple initial entry paths, but may serve as “on the job” training, as well.

In addition, although research suggests that focused, short-term trainings hold promise for improving ECE teachers’ practice and knowledge base in specific areas, there is much less available information on an ongoing system of professional development for currently employed—but minimally educated—ECE teachers. Pritchard (1996) notes that “professional development in the nation’s ECE field has taken the form of a training non-system, characterized

by inconsistent training requirements across states and program types, disconnected training programs, and limited opportunities for professional advancement” (p. 124). The literature specifically focusing on ECE professional development is far outweighed by the number of books and scholarly articles that focus on the professional development of K-12 teachers, especially those who teach math or science. There is also little information on how professional development might be implemented across and responsive to the range of ECE programs.

In New Jersey a range of institutions provide professional development for preschool teachers. Preschool teachers in the Abbott and ECPA districts are required to take at least 105 hours of professional development within a five year period. Both Abbott and ECPA districts must submit an annual operational plan that includes provisions for professional development. Preschool professional development is also offered under the auspices of each county’s Resource and Referral (R&R), and by most of the state’s 2-year community colleges. The fact that there is no coordinated system of professional development makes it less likely that teachers are going to receive systematic, personalized training that can increase their knowledge and skills.

#### *Capacity and Content of Professional Development Agencies*

We asked representatives from the school districts, the Resource and Referral agencies and those community colleges that provide professional development training a series of questions about the content and capacity of their early childhood professional development programs. We begin with the Abbott and non-Abbott ECPA school districts, then move on to the Resource and Referral agencies, and end with the community colleges. We then present a comparison across agencies and discuss the supports and follow-up services offered by all three types of agencies.

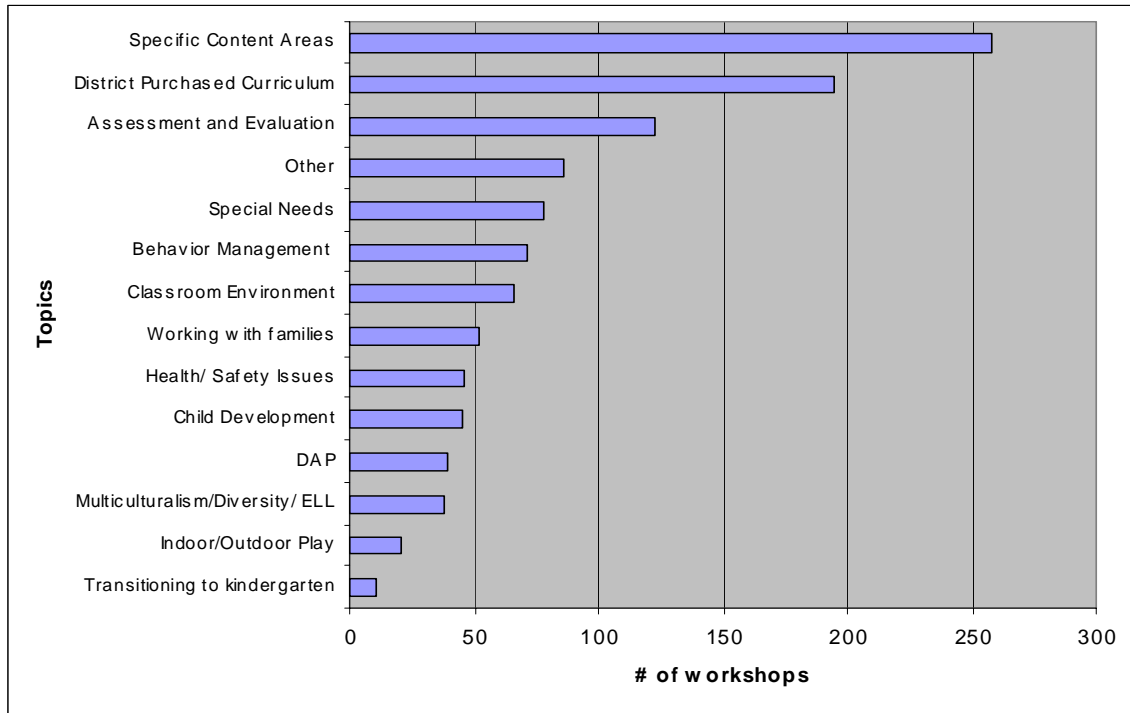
### *Abbott and ECPA Districts*

As mentioned previously, 29 Abbott and 42 ECPA districts were interviewed about the capacity and content of their early childhood professional development offerings. Ranging in size from two to 451 preschool teachers, these districts offered a total of 1,127 workshops with more than 12,500 teachers attending.

*Workshop instructors.* The districts employed approximately 460 workshop instructors over the past year. Almost three quarters (74%) of these instructors have a Master's degree or higher. In addition, almost 50% have a degree specializing in early childhood education or Child Development that specifically covers children younger than kindergarten age. Almost 70% of workshop instructors have had direct employment experience working with 3- and 4-year-old children. Almost three quarters of the instructors are White, while approximately 25% are either African-American or Latina.

*Content.* Figure 8 summarizes the topics covered by district workshops. The largest proportion of workshops offered by districts (40%) were concerned with early childhood curriculum and included 258 workshops about curriculum content and 195 that addressed district purchased curricula. In contrast, less than 10% of workshops addressed diversity topics including multiculturalism, diversity, ESL, and working with children with special needs.

Figure 8: Number of Workshops by Topic



Over 80% of districts reported that the expressed needs of teachers and/or teaching assistants were one of the most important considerations when determining their training program for the year. Recent research was used by 18% of districts.

Whether teachers work in an Abbott or ECPA district was found to influence the content they could access in workshops. Abbott districts are more likely to offer workshops in assessment, setting up the classroom environment, child development, behavior management, DAP, working with children with special needs, and health and safety issues. These differences were significant at the  $p < .05$  level.

Districts were categorized into five different groups according to auspice and the number of preschool teachers. Content of workshops available to teachers differed significantly depending on the size and auspice of the district (Table 3). In general, teachers in the smallest ECPA districts (1-5 teachers) were the least likely to receive training in most of the topics,

except for transitioning to kindergarten, while teachers in the largest Abbott districts (271-451 teachers) are more likely to be able to participate in training that addresses a wide array of areas. As you can see the middle-sized Abbott districts (70 to 138 teachers) were less likely than either the smallest (20 to 55 teachers) or the largest (271 to 451 teachers) Abbott districts to provide training in all areas except diversity/ELL and behavior management.

Table 3: Percentage of Districts by Topic Area

Workshop Topics	ECPA districts with 1-5 teachers (N=21)	ECPA districts with 5-28 teachers (N=19)	Abbott districts with 20-55 teachers (N=14)	Abbott districts with 70-138 teachers (N=12)	Abbott districts with 271-451 teachers (N=3)
Assessment	24	53	86**	67	67
Behavior Management	33	37	57	58	100**
Child Development	10	21	43	17	67**
Classroom Environment	19	37	64	42	100**
Curriculum	76	68	86	67	100*
DAP	14	21	64**	17	33
Health/Safety	14	21	64	25	67**
Play	10	21	21	8	33*
Diversity/ELL	19	32	36	50	67**
Special Needs	38	32	79	42	100**
Transition to Kindergarten	14**	11	14**	0	0
Working with families	14	32	57**	33	33

\*  $p < .05$

\*\*  $p < .001$

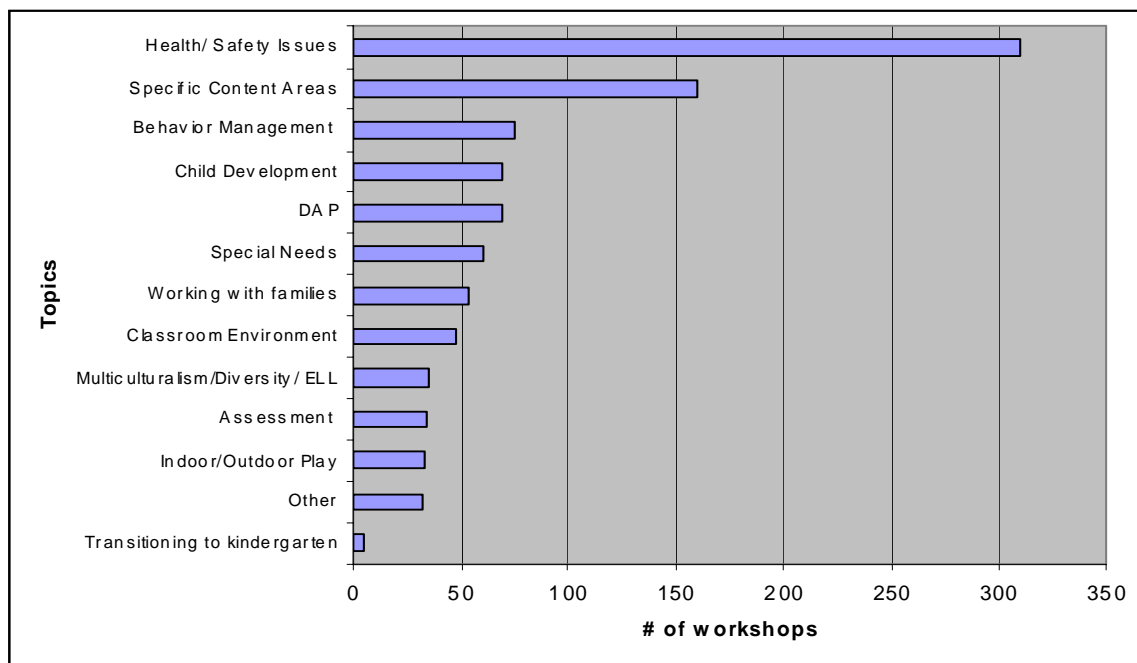
### *Resource and Referral Agencies*

Resource and Referral (R&R) agencies have three purposes. First, they are referral and resource service for parents who are in need of childcare. Second, they also maintain data in

regard to childcare costs and supply and demand issues (Helburn & Bergmann, 2002). Finally, one of their key roles is to offer training opportunities to family day care providers, caregivers in childcare centers, and personnel in public schools. The seventeen R&Rs offered altogether 984 workshops with a total of 3970 participants. There were 159 workshop instructors employed by the resource and referral agencies last year. More than half of these instructors (64%) held a Master’s degree or higher and had a degree in early childhood or a related field. The majority (78%) of these instructors had experience working with 3-and 4-year-olds. We were unable to obtain information on their racial and ethnic background.

*Content.* Except for transitioning to kindergarten, a wide array of content was addressed in the trainings provided at Resource and Referral Agencies. As can be seen in Figure 9, 32% of all workshops were in the area of health and safety. The next largest category (16%) was workshops concerning early childhood curriculum, with 159 workshops addressing the teaching of content.

Figure 9: Topics of Resource and Referral Workshops



Over 80% of the Resource and Referral (R&R) agencies reported that the expressed needs of preschool teachers and/or center directors were used to determine the content of their workshops. Thirty percent said that they used current research in making their decisions.

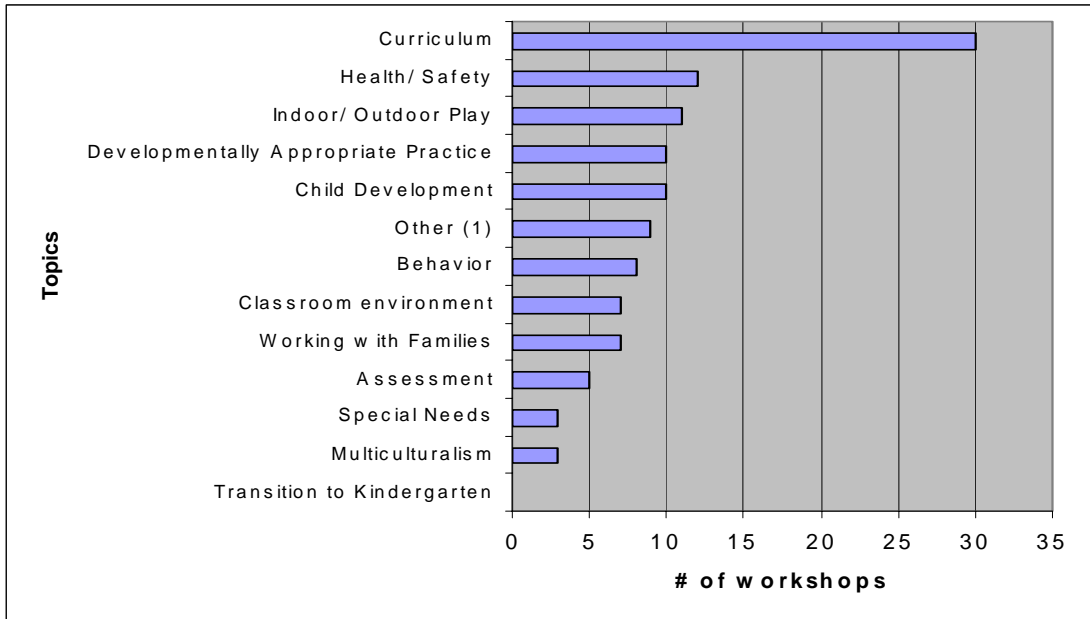
### *Community Colleges*

In addition to providing AAS and AA degrees, eight of the 17 community colleges that were interviewed also offer not-for-credit workshops and trainings for preschool teachers. There were 115 workshops offered at these community colleges, and a total of 1,480 people attended these workshops.

The community colleges employed 69 instructors to lead these workshops. Fifty-seven percent of the workshop instructors have a Master's degree or higher. The majority (90%) of these instructors have a degree in early childhood education and all of them have experience working with 3- and 4-year-old children. Sixty-eight percent of these instructors are White, 6% are African-American, and four percent are Latina. We were unable to ascertain the ethnicity of 22% of the workshops instructors.

*Content.* Figure 10 summarizes the number of workshops by topic area offered by community colleges. The highest proportion of workshops addressed curriculum practice, with 30 workshops being offered on this topic. Conversely, only six workshops addressed diversity issues. The content addressed in workshops was usually chosen based on the feedback and attendance at previous workshops and student need.

Figure 10: Topics of Community College Workshops



*Cross-Agency Comparisons*

In summary, an enormous number of workshops/trainings were offered by school districts, resource and referral agencies, and community colleges. The trainers who were mostly contracted by these agencies were all highly qualified and experienced in working with preschool aged children. While a total of 2,227 trainings were provided to preschool teachers during 2003-04, the content of the majority of these workshops was focused on curriculum practices. Very few trainings addressed working with children and families from diverse cultures as well as children with special needs.

Interplaying with the content teachers receive in their ongoing professional development is the agency overseeing the training. As can be seen in Table 4, the Resource and Referral agencies are providing significantly more training across the content areas than either the districts or the community colleges that provide professional development workshops. Any given R&R covers more topics and provides more workshops in particular topics than either school districts or community colleges.



Table 4: Workshop Content by Agency

Topic	% Districts (N = 71)	% Community Colleges (N= 8)	% R & R (N = 17)
Assessment	54	12	88 **
Behavior Management	46	62	100 **
Child Development	23	37	94 **
Classroom Environment	39	50	82 **
Curriculum	75	87	100 **
DAP	27	50	88 **
Health & Safety	30	75	100 **
Play	15	50	76 **
Diversity	34	25	82 **
Children with Special Needs	48	12	94 **
Transitioning to Kindergarten	10	0	24 *
Working with Families	32	63	100 **

\*  $p < .05$

\*\*  $p < .001$

*Supports.* Many of New Jersey’s preschool teachers are also enrolled in P-3 related coursework, work an 8-hour day, and are likely to be juggling work and family demands. They may also be English Language Learners. It follows then, that they may need additional support to be able to participate in professional development opportunities. We therefore examined the various kinds of supports offered by agencies to preschool teachers (see Table 5).

Table 5: Percentage of Agencies offering Supports

Type of Support	Districts (N=71)	Community Colleges (N=8)	R & R's (N=17)
Bilingual Workshops	17	0	53 **
Scholarships	0	13	12
Child care	1	0	6
Meals/Snacks	70 **	25	59
Free books/resources	63 *	50	53
Substitute Teachers	53 **	0	0
Workshops at child care centers	18	0	59 *

\*  $p < .05$

\*\*  $p < .001$

Significant differences were found in the supports offered by each agency. Teachers attending public school district trainings were more likely to be able to have a substitute teacher while they attended training as well as books and resources. Resource and referral agency were more likely to provide training in more than one language and to offer workshops at child care centers. There was also variation in the support offered in the Abbott and non-Abbott ECPA districts. Abbott districts were more likely to provide books and resources, substitute teachers, and workshops at local child care sites than their non-Abbott counterparts. These differences were at the  $p < .05$  levels.

*Follow-up.* Effective professional development not only necessitates that teachers are supported to engage in learning opportunities, but that the training they receive is also extended through follow-up activities and resources. Follow-up activities enable teachers to implement the

ideas they have learned in a workshop within their own classroom context and may include technical assistance, further workshops in the same topic, or ongoing contact among participants.

Table 6 summarizes the percentage of agencies that provide a range of follow-up activities.

Table 6: Percentage of Agencies offering Follow-up

Type of follow-up	Districts (N=71)	Community Colleges (N=8)	R & R's (N=17)
No follow-up	3	0	6
Contact Person	62	25	94**
Future classes	32	63	88**
Facilitation of ongoing contact among attendees	24*	0	24*

\*  $p < .05$

\*\*  $p < .001$

Overall, the three different types of agencies all report providing a range of follow-up in addition to their trainings. Again, the R&Rs are more likely to provide follow-up of all types than either community colleges or school districts. However, teachers receiving training in their districts are also likely to have access to a contact person, and ongoing contact among attendees.

In addition, participants were asked if they provide mentoring or technical assistance. 94% of the sixteen R&Rs responding, 75% of the twelve 4-year colleges and 67% of the fifteen community colleges responding offer mentoring/ technical assistance. Less than half (47%) of the 72 districts responding to this question offer mentoring/ technical assistance.

## Outreach and Partnerships

Creating an integrated system of professional development and teacher preparation requires that there be collaboration and cooperation between and across institutions. In order to determine the extent of existing partnerships in New Jersey, all participants were asked a series of questions about their outreach and partnerships with other institutions. We found that these partnerships ranged anywhere from meeting to discuss future collaborations, to offering an entire Master's program in a local school district. Given the large number of non-traditional preschool teachers seeking higher qualifications, we were particularly interested in discovering partnerships that would enable students to take for-credit coursework off campus or receive credit for professional development trainings.

### *For-Credit Partnerships*

Only half of the 4-year colleges and universities reported partnering with districts or R&Rs to offer for-credit coursework to preschool teachers. These six universities partnered with only nine districts and two R&R agencies. The university partnerships were more likely to occur in the larger Abbott districts. In addition, five community colleges offer for-credit coursework at a local school districts or R&R.

Eight of the community colleges said that they have articulation agreements with 4-year colleges or universities that enable students at the community college to count some of their early childhood coursework towards P-3 certification. These partnerships include agreements that accept specific coursework and 4-year institutions offering P-3 coursework on a community college campus.

### *Not for-Credit Partnerships*

In addition to for-credit coursework, many institutions reported partnering to provide not-

for-credit professional development training. Two of 4-year institutions said they partner with another 4-year university such as Bank Street College of Education to provide conferences and workshops for preschool teachers. Twenty-two districts reported working with a local consortium to obtain professional development for their preschool teachers. Eleven school districts, most of them smaller ECPA districts, collaborated with another district in order to provide more comprehensive professional development for their combined preschool teaching staff. Nine R&R agencies reported collaborating with another local consortium to provide, develop or share facilities for professional development trainings.

## RECOMMENDATIONS

This study examined the current system of early childhood teacher preparation and professional development in New Jersey. As the findings from this study attest there is a wide range of training and certification programs available in this state should a preschool teacher want to both obtain a teaching credential and improve their expertise. However, the two components of teacher education, teacher preparation and professional development, continue to work primarily in isolation from one another and as a consequence, opportunities for effective and long lasting improvement in educational practice are being minimized. With the aim of forging further partnerships and linkages within and across programs and agencies we make the following recommendations:

### Recommendations for Improving Teacher Preparation

Our findings show that over 5,500 students are currently enrolled in programs that could eventually lead to an early childhood teaching credential. These programs range from an AA degree through to a specialized P-3 Master's degree. Moreover, some 2,500 of these students are enrolled in programs at 4-year colleges that will allow them to obtain a P-3 teaching certificate upon completion. Given that there was no system in place to prepare preschool teachers when the *Abbott* decision (2000) was made, these findings are a credit to the higher education community in New Jersey. However, if this system is to ensure that not only qualified but knowledgeable teachers are produced then several key areas now require improvement:

#### *Capacity*

Overall the current early childhood teacher preparation system appears to have the necessary capacity to meet the growing demand for preschool teachers. The majority of faculty members in New Jersey have a degree in early childhood and have direct experience working

with preschool aged children. In addition, over half of the full-time early childhood faculty is tenured, providing a stable base from which to continue to build these programs. These findings are in contrast to national research that shows most teacher education programs have difficulty finding and keeping faculty that have specialized knowledge and experience in preschool education (Early & Winton, 2001).

Despite these positive findings, however, there is dramatic variability in student: faculty ratios between institutions at both the 2- and 4-year levels that may undermine the quality of some certification programs. Some schools in New Jersey have a ratio as low as 11:1, while several others have over a hundred students to every faculty member. Additionally, a lack of full-time early childhood faculty was cited as a challenge at 55% of the 2- and 4-year schools. High student: faculty ratios lead to larger advisement loads that can have a significant impact on the quality of students' educational experiences. This is of particular concern for non-traditional students—who comprise a large proportion of the Abbott teaching workforce—because supportive and personalized advisement is a key to their success in school (Darling-Hammond, 2000; Horn & Carrol, 1996). If this variation between institutions is to be addressed then some consideration must be given to the coordination of resources across institutions. One step in this direction would be to create an agreed upon standard for student: faculty ratio. This ratio would then guide resource decisions at the individual institutional level and help to eradicate the current variation.

### *Content*

The knowledge base associated with early childhood teaching has changed rapidly in recent years. While teacher education programs have historically focused primarily on child development and the application of these principles to curriculum and teaching, the current

policy expectation that preschools become a part of formal schooling has created additional demands. In addition to child development knowledge, teachers need to facilitate learning across the content areas for diverse groupings of children.

Our findings indicate that students currently in P-3 preparation programs at 2- or 4-year colleges are more likely to receive specific coursework in foundational knowledge and literacy than in other content areas or diversity issues. These findings resonate with other reports (Bowman, Donovan, & Burns, 2001) that show that preschool teachers are woefully under-prepared to teach in diverse settings, and are not receiving the practical and theoretical preparation in domain specific knowledge that they need (Isenberg, 2000). However, at the same time as new topics are supposed to be included in the teacher education curriculum, these programs are still limited to only 30 credits of professional knowledge. The limited number of credit hours available, coupled with the fact that early childhood is an inter-disciplinary field, means that many topics in current P-3 programs are addressed as part of an integrated class rather than in a stand-alone course. It is therefore difficult to determine how much preparation teachers are actually receiving in specific topics. However, what is clear from the findings of this study is much more explicit attention must be given in programs to preparing preschool teachers to work with children from culturally and linguistically diverse backgrounds as well as including children with special needs.

While further research is needed to really tease apart who is getting what, we recommend that teacher-preparation programs engage in a self study or audit of the content being addressed within their classes and across their programs to ensure that teachers are being prepared to create rigorous, developmentally-appropriate curriculum that enables all children to learn across the content areas and in a way that ensures all children receive this content.



It is also likely that many faculty working in New Jersey's institutions of higher education do not have the up to date knowledge needed for the current social, political, and economic context. For example, special education and ESL have traditionally been separate areas of education, and early childhood faculties were not expected to be able to incorporate these topics into their curriculum and child development classes. Therefore, as these topics become integrated into regular education programs, faculties of education themselves require support and professional development to upgrade their own understandings in particular areas (Horn-Wingard, Hyson, & Karp, 2000). It is therefore recommended that institutions of higher education carefully examine the qualifications and expertise of faculty regarding diversity issues and takes steps to ensure those faculties improve their knowledge and skills in these areas. While such training cannot be a one size fits all approach, and will need to be specifically tailored to the experiences of the faculty at each institution, it is also important that some monitoring of this process is undertaken.

#### *Creating a Unified System of Teacher Preparation*

In order to ensure that every preschool teacher within the state of New Jersey receives an equivalent preparation it is also necessary that there be some coordination across the institutions of higher education that prepare preschool teachers. While the individuality of institutions is important and should be protected, it is impossible to create a system of teacher preparation without some kind of cross -institutional organization and monitoring.

It is therefore recommended that New Jersey's Commission on Higher Education should take a leadership role in this task. As part of this role, the Commission might bring together the Deans of the 2- and 4-year institutions on a regular basis to discuss variability within the current system, and to develop agreed upon principles for hiring, and training of faculty, as well as

staffing of programs. One starting point for this conversation would be to examine in more detail the current content of individual programs to ensure that all students are receiving coursework aligned with the licensing code.

A second pathway toward coordination is to address the articulation of coursework between 2- and 4-year institutions of teacher preparation. While there is a statewide agreement that requires 4-year colleges to accept the credits earned at community colleges, at the current time, most 4-year institutions will not allow education courses taken at community colleges to count towards certification program requirements. Every effort should be made to ensure that articulation agreements do not diminish the quality of preparation teachers receive. One possible model that the state might want to examine is that of the articulation agreement between Hudson County Community College and Jersey City University.

Another way to capitalize on the strengths of the community colleges is to follow other states that have begun to explore new degree options. Arkansas, for example, recently developed an Associate of Arts in Teaching (A.A.T.), a 2-year transfer degree designed for students who plan to transfer to a 4-year college to obtain a BA in education and teacher certification. This degree includes general education coursework as well as foundation course work in teacher education and a field experience ([www.asumh.edu](http://www.asumh.edu), retrieved 8.12.04).

#### Recommendations for Improving Preschool Teacher Professional Development

The findings of this study indicate that there is no lack of professional development opportunities for preschool teachers. Between the three major agencies providing some kind of training, there are literally thousands of workshops going on across the state each year. What is less clear is whether these trainings are being organized and monitored to ensure that teachers are getting the content that is known to promote high quality educational experiences for young

children and in a way that enables them to make connections between theory and practice. The following recommendations are made with the aim of achieving this goal.

### *Capacity and Content*

Our findings indicate that teachers are receiving training in curriculum content and using specific curriculum models but they are less likely to get classes in addressing the needs of diverse student learners. The Abbott and non-Abbott ECPA districts serve the states most disadvantaged and also the most diverse student populations. Yet, less than 10% of the over 2,300 training session offered in 2003-04 were concerned with either cultural or linguistic diversity or working with children with special needs. Moreover, only 31% of agencies facilitating professional development opportunities for preschool teachers offered training in these areas.

There appear to be several factors interplaying with both the availability of training and the content of what is offered. The first of these is the variation between agencies in terms of breadth and depth of the content of their training programs. The Resource and Referral agencies provide the most comprehensive training as they are the most likely to provide workshops in all of the topic areas, as well as multiple trainings in many of these topics. This findings is not surprising given that these agencies are exclusively focused on early childhood issues and have had years of experience in the area of professional development for teachers working with young children.

With the public funding of preschool programs, school districts that have been used to focusing on K-12 issues are now more involved in the training of preschool teachers. It is not surprising therefore that these districts do not provide as comprehensive training as the county R&Rs, however, there is variation between and within district type. These differences appear to

be related to different regulatory structures as well as the number of preschool teachers within a district. In general, teachers in the *Abbott* districts receive more professional development, in more topic areas, than teachers in the ECPA districts. One reason for this difference is probably due to the explicit professional development requirements provided in the Abbott Preschool Program Implementation Guidelines (Department of Education, 2003). Under these guidelines the Abbott districts are required to complete a three-year plan that includes a professional development needs assessment, and trainings in a comprehensive list of content areas. On the other hand, non-Abbott ECPA districts are only expected to give general descriptions of need and anticipated trainings. One way to address the discrepancies between types of districts is for the non-Abbott ECPA districts to be required to follow the same guidelines for professional development as Abbott districts, and for the state to provide adequate resources for them to do this.

Yet even though there are these guidelines, there is still substantial variability within the Abbott districts. Both the largest (more than 250 teachers) and the smallest (55 to 70 teachers) Abbott districts, are providing training in a wider range of subjects and more trainings per topic area, than those districts with between 70 and 138 teachers. As this study did not focus on the administrative structure in the districts, it is not possible for us to postulate why this may be so. But, suffice it to say, it might be necessary for the Department of Education to explore whether these districts, have the administrative resources that they need to ensure that their preschool teachers receive appropriate training opportunities.

The aim of professional development is ongoing teacher learning that leads to improved educational practices. Effective professional development therefore, must be context specific, build on previous knowledge, and include follow-up so that teachers can actually try out new

ideas in practice with expert support. While, the major training agencies are providing many workshops, it is not evident that the available training either provides the range or depth of knowledge that preschool teachers must know. Given the variability across the agencies providing professional development, and the potential waste of resources and teacher time, it is recommended that efforts be made to coordinate the professional development of preschool teachers across a particular region. This will require not only communication between agencies about particular offerings but also a key person who takes up this coordinating role. The Professional Development Center could play this role, but for them to be effective they will require additional resources and authority with both local school districts as well as agencies providing professional development.

Part of this coordination would involve building more effective partnerships between resource and referral agencies and school districts. According to our data only five of the Resource and Referral agencies are involved in such partnerships. In order to help districts take advantage of the strengths of the Resource and Referral agencies the state should provide additional resources that would enable these agencies to increase their work in the school districts. These partnerships could take several different forms including providing trainings and workshops for public school teachers and/or providing technical support for district administrators who are attempting to set up preschool professional development programs.

#### Conclusion: Toward Creating an Integrated System of Preschool Teacher Education

In conclusion, New Jersey has invested a great deal in the success of its early childhood programs. However, if this policy is going to succeed—if publicly funded preschool is going to give disadvantaged children an equal footing going into elementary school, then their preschool teachers must be adequately prepared to teach to the strengths of their students and their

communities. The findings of this study indicate that there are a number of areas where the two components of teacher development could be more effectively brought together to ensure that preschool teachers have not only a baseline of knowledge but are engaged in ongoing training opportunities to refine and build on their expertise. To be sure, there are valuable partnerships occurring across institutions but for the most part they appear to be ad hoc and individually created leaving those teaching in smaller districts and further from colleges and universities at a disadvantage. To ensure consistency and continuity in the development of the preschool teacher workforce, New Jersey must now target its financial and human resources to the development of a more coordinated system of teacher preparation and professional development.

Given that there are so many different individuals and institutions involved in preschool teacher training of some kind, we recommend that a state level coordinating agency be developed in conjunction with the Professional Development Center, the Department of Education, The Department of Human Services and the Commission for Higher Education. While we acknowledge that one of the tasks of the Commission for Higher Education is coordinating teacher education programs there is no committee or agency charged with the responsibility of overseeing both professional development and teacher education for a specific sector. This coordination is particularly critical in preschool education because the workforce is extraordinarily diverse in qualifications, knowledge, and level of experience and is located in a range of settings that have historically been regulated differently.

Given the findings of this study, the main tasks of this coordinating group would be to address the lack of attention being given to issues of diversity at all levels of the current system. This coordination would not only need to include training for teachers but should provide for the retooling of those who train teachers as well as those who oversee them. Other areas of focus

would be to determine strategies for coordination and communication between professional development and teacher preparation institutions as well as the allocation of resources. Another area requiring coordination will be the development of expert leadership at various levels of the system so that preschool teachers are able to access training suited to their own particular circumstances. Creating this coordinating body will be no easy task given the traditional separation of professional development and teacher preparation but focusing on improving the way we educate preschool teachers will help to ensure no preschool aged child is left behind.

## REFERENCES

- Abbott v. Burke*, 153 N.J. 480 (1998).
- Abbott v. Burke*, 163 N.J. 95 (2000).
- Ackerman, D. J. (2004). States' efforts in improving the qualifications of early care and education teachers. *Educational Policy*, 18, 311-337.
- Barnett, W. S. (2003). Better teachers, better preschools: Student achievement linked to teacher qualifications. *Preschool Policy Matters*, 2. New Brunswick, NJ: NIEER.
- Bowman, B. T., Donovan, M. S., & Burns, M. S. (Eds.). (2001). *Eager to learn: Educating our preschoolers*. Washington, DC: National Academy Press.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (2000). *How people learn: Brain, mind, experience, and school*. Washington, DC: National Academy Press.
- Bredenkamp, S. (1996). Early childhood education. In J. Sikula, T. Buttery, & E. Grayton (Eds.), *Handbook of research on teacher education* (pp. 323-347). New York: Simon & Schuster Macmillan.
- Burns, M. S., Midgette, K., Leong, D., & Bodrova, E. (2003). *Prekindergarten benchmarks for language and literacy: Progress made and challenges to be met*. New Brunswick, NJ: NIEER.
- Burton, A., Whitebook, M., Young, M., Bellm, D., Wayne, C., Brandon, R. N., & Maher, E. (2002). *Estimating the size and components of the U.S. child care workforce and caregiving population: Key findings from the child care workforce estimate (Preliminary report)*. Washington, DC: Center for the Child Care Workforce.
- Cassidy, D. J., Buell, M. J., Pugh-Hoese, S., & Russell, S. (1995). The effect of education on child care teachers' beliefs and classroom quality: Year one evaluation of the TEACH early childhood associate degree scholarship program. *Early Childhood Research*



- Quarterly, 10*, 171-183.
- Cassidy, D. J., Hicks, S. A., Hall, A. H., Farran, D. C., & Gray, J. (1998). The North Carolina Child Care Corps: The role of National Service in child care. *Early Childhood Research Quarterly, 13*, 589-602.
- Darling-Hammond, L. (2000a). Solving the dilemmas of teacher supply, demand, and standards: How we can ensure a competent, caring, and qualified teacher for every child. New York: National Commission on Teaching & America's Future. Retrieved from <http://www.nctaf.org/publications/solving.pdf>.
- Darling-Hammond, L. (Ed.). (2000b). *Studies of Excellence in Teacher Education*. Washington D.C.: AACTE Publications.
- Darling-Hammond, L., & McLaughlin, M. W. (1996). Policies that support professional development in an era of reform. In I. Oberman (Ed.), *Teacher learning: New policies, new practices* (pp. 202-218). New York: Teachers College Press.
- de Kruif, R. E. L., McWilliam, R. A., & Ridley, S. M. (2000). Classification of teachers' interaction behaviors in early childhood classrooms. *Early Childhood Research Quarterly, 15*, 247-268.
- Department of Education. (2003). *Abbott Preschool Program Implementation Guidelines*. Retrieved August 23, 2004, from the Department of Education, Office of Early Childhood Education Web site:  
<http://www.state.nj.us/ece/abbott/guidelines/guidelines.htm>
- Dwyer, M. C., Chait, R., & McKee, P. (2000). *Building strong foundations for early learning: Guide to high-quality early childhood education programs*. Washington, DC: U.S. Department of Education, Planning and Evaluation Service.

- Early, D. M., & Winton, P. J. (2001). Preparing the workforce: Early childhood teacher preparation at 2- and 4-year institutions of higher education. *Early Childhood Research Quarterly, 16*, 285-306.
- Elmore, R. F. (2002). *Bridging the gap between standards and achievement: The imperative for professional development in education*. Washington, DC: Albert Shanker Institute.
- Espinosa, L., Mathews, M. C., Thornburg, K. R., & Ispa, J. (1999). Training and rural child care providers: Results of Project REACH. *NHSA Dialog, 2*, 361-388.
- Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record, 103*, 1013-1055.
- File, N., & Gullo, D. F. (2002). A comparison of early childhood and elementary education students' beliefs about primary classroom teaching practices. *Early Childhood Research Quarterly, 17*, 126-137.
- Fullan, M. (1991). *The new meaning of educational change (Second ed.)*. New York: Teachers College Press.
- Fullan, M. G. (1995). The limits and the potential of professional development. In T. R. Guskey & M. Huberman (Eds.), *Professional development in education: New paradigms and practices* (pp. 253-267). New York: Teachers College Press.
- Guskey, T. R. (1995). Professional development in education: In search of the optimal mix. In T. R. Guskey & M. Huberman (Eds.), *Professional development in education: New paradigms and practices* (pp. 114-131). New York: Teachers College Press.
- Hawley, W. D., & Valli, L. (1999). The essentials of effective professional development. In G. Sykes (Ed.), *Teaching as the learning profession: Handbook of policy and practice* (pp.

- 127-150). San Francisco: Jossey-Bass Publishers.
- Helburn, S. W. (Ed.). (1995). *Cost, quality and child outcomes in child care centers (Technical report)*. Denver: Department of Economics, Center for Research in Economics and Social Policy, University of Colorado at Denver.
- Helburn, S. W., & Bergmann, B. R. (2002). *America's child care problem: The way out*. New York: Palgrave for St. Martin's Press.
- Honig, A.S., & Hirallal, A. (1998, June). *Which counts more for excellence in childcare staff: Years in service, education level or ECE coursework?* Paper presented at the Annual Quality Infant/Toddler Caregiving Workshop, Syracuse, NY.
- Horm-Wingerd, D., Caruso, D. A., Gomes-Atwood, S., & Golas, J. (1997). Head Start Teaching Center: Evaluation of a new approach to Head Start staff development. *Early Childhood Research Quarterly, 12*, 407-424.
- Horm-Wingerd, D., Hyson, M., & Karp, N. (2000). Introduction. In National Institute on Early Childhood Development and Education, U.S. Department of Education, Office of Educational Research and Improvement. *New teachers for a new century: The future of early childhood professional preparation*. Washington, D.C.: U.S. Department of Education.
- Horn, L. J., & Carroll, C. D. (1996). *Nontraditional undergraduates: Trends in enrollment from 1986 to 1992 and persistence in attainment among 1989-90 beginning postsecondary students*. Washington, D.C.: National Center for Education Statistics, U. S. Department of Education, Office of Educational Research and Improvement. Retrieved from <http://www.nces.ed.gov/pubs/97578.pdf>.
- Howes, C. (1997). Children's experiences in center-based care as a function of teacher

- background and adult: child ratio. *Merill-Palmer Quarterly*, 43 (3), 404-425.
- Howes, C., Whitebook, M., & Phillips, D. (1992). Teacher characteristics and effective teaching in child care: Findings from the national child care staffing study. *Child and Youth Care Forum*, 21 (6), 399-414.
- Hyson, M. (Ed.). (2003). *Preparing early childhood professionals: NAEYC's standards for programs*. Washington, DC: National Association for the Education of Young Children.
- Isenberg, J. (2000). The state of the art in early childhood professional preparation. In National Institute on Early Childhood Development and Education & U.S. Department of Education & Office of Educational Research and Improvement (Eds.), *New teachers for a new century: The future of early childhood professional preparation* (pp. 17-58). Washington, DC: US Department of Education.
- Katz, L. G., & Goffin, S. G. (1990). Issues in the preparation of teachers of young children. In B. Spodek & O. N. Saracho (Eds.), *Yearbook in early childhood education, Vol. 1: Early childhood teacher preparation* (pp. 192-208). New York: Teachers College Press.
- Kontos, S., & Wilcox-Herzog, A. (1997). Teachers' interactions with children: Why are they so important? *Young Children*, 52 (2), 4-12.
- Lewis, L., Parsad, B., Carey, N., Bartafai, N., Farris, E., & Smerdon, B. (1999). *Teacher quality: A report on the preparation and qualifications of public school teachers*. Washington, DC: National Center for Education Statistics.
- Little, J. W. (1993). Teachers' professional development in a climate of educational reform. *Educational Evaluation and Policy Analysis*, 15, 129-151.
- Loucks-Horsley, S. (1995). Professional development and the learner centered school. *Theory Into Practice*, 34, 265-271.

- McCarthy, J. (1990). The content of early childhood teacher education programs: Pedagogy. In B. Spodek & O. N. Saracho (Eds.), *Yearbook in early childhood education, volume 1: Early childhood teacher preparation* (pp. 82-101). New York: Teachers College Press.
- McMullen, M. B. (1998). The beliefs and practices of early childhood educators in the U.S.: Does specialized preparation make a difference in adoption of best practices? *International Journal of Early Childhood Education, 3*, 5-29.
- McMullen, M. B. (1999). Characteristics of teachers who talk the DAP talk and walk the DAP walk. *Journal of Research in Early Childhood Education, 13*, 216-230.
- McMullen, M. B. (2003). *Acquiring and supporting developmentally appropriate beliefs and practices in early care and education professionals*. Paper presented at the Society for Research in Child Development Biennial Meeting, Tampa, Florida.
- Miles, M. B. (1995). Foreword. In M. Huberman (Ed.), *Professional development in education: New paradigms and practices* (pp. vii-ix). New York: Teachers College Press.
- National Commission on Teaching & America's Future. (1996). *What matters most: Teaching for America's future*. New York: Author.
- Parsad, B., Lewis, L., & Farris, E. (2001). *Teacher preparation and professional development: 2000*. Washington, DC: National Center for Education Statistics.
- Pritchard, E. (1996). Training and professional development: International approaches. In S. L. Kagan & N. E. Cohen (Eds.), *Reinventing early care and education: A vision for a quality system* (pp. 124-141). San Francisco: Jossey-Bass Publishers.
- Rhodes, S., & Hennessy, E. (2001). The effects of specialized training on caregivers and children in early-years settings: An evaluation of the foundation course in playgroup practice.

*Early Childhood Research Quarterly*, 15, 559-576.

Ryan, S., & Ackerman, D. J. (2004). *Getting Qualified: A Report on the Efforts of Preschool Teachers in New Jersey's Abbott Districts to Improve their Qualifications*. New Brunswick, NJ: NIEER. Available at <http://nieer.org/resources/research/GettingQualified.pdf>.

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), online journal available at <http://ecrp.uiuc.edu/v4n1/saluja.html>.

Saracho, O., & Spodek, B. (1983). Preparing teachers for bilingual/multicultural classrooms. In O. N. Saracho & B. Spodek (Eds.), *Understanding the multicultural experience in early childhood education* (pp. 125-146). Washington, DC: NAEYC.

Scott-Little, C., Kagan, S. L., & Frelow, V. W. (2003). *Standards for preschool children's learning and development: Who has standards, how were they developed, and how are they used? (Executive summary)*. Greensboro, NC: SERVE.

Shkodriani, Gina (2004). Seamless Pipeline from Two-year to Four-year Institutions for Teacher Training. *Preparing Tomorrow's Teachers to Use Technology (PT3) Policy Brief*. Denver, CO: Education Commission of the States.

Smith, K. E. (1997). Student teachers' beliefs about developmentally appropriate practice: Pattern, stability, and the influence of locus of control. *Early Childhood Research Quarterly*, 12, 221-243.

Spodek, B., & Saracho, O. N. (1990). Preparing early childhood teachers. In B. Spodek & O. N. Saracho (Eds.), *Yearbook in early childhood education, Volume 1: Early childhood*

- teacher preparation* (pp. 23-44). New York: Teachers College Press.
- Stott, F., & Bowman, B. (1996). Child development knowledge: A slippery base for practice. *Early Childhood Research Quarterly, 11*, 169-183.
- Vartulli, S. (1999). How early childhood teacher beliefs vary across grade level. *Early Childhood Research Quarterly, 14*, 489-514.
- Waiwaiole, E. & Boswell, K. (2001). Crossroad In Teacher Education. *Community College Times*. Retrieved August, 12, 2004, from [www.aacc.nche.edu](http://www.aacc.nche.edu)
- Whitebook, M. (2003). *Bachelor's degrees are best: Higher qualifications for pre-kindergarten teachers lead to better learning environments for children*. Washington, DC: The Trust for Early Education.