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KNOWLEDGE OF PRESCHOOL PROGRAMING AND PRACTICE IN EARLY CHILDHOOD SPECIALIST STUDENTS TRAINED IN ON-CAMPUS AND OFF-CAMPUS PRESCHOOL TRAINING SITES IN COMMUNITY COLLEGES IN NORTH CAROLINA

The University of North Carolina at Greensboro PH.D. 1983

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by

Jean Bertolet Price, II

A Dissertation submitted to
the Faculty of the Graduate School at
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Approved by

Barbara Clawson
Dissertation Adviser

APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of the Graduate School at the University of North Carolina at Greensboro.

Dissertation Adviser Barbara Clawson

Committee Members Helen Canaday

William A Powers

Mildred Johnson

March 25, 1983
Date of Acceptance by Committee

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Date of Final Oral Examination

PRICE, JEAN BERTOLET II. Knowledge of Preschool Programing and Practice in Early Childhood Specialist Students Trained in On-campus and Off-campus Preschool Training Sites in Community Colleges in North Carolina. (1983) Directed by: Dr. Barbara N. Clawson. Pp. 93.

This study was conducted to determine the level of knowledge of preschool programing and practice in second-year Early Childhood Specialist students in the North Carolina community college system who had received their practical training either on campus at a college-operated preschool laboratory or off campus at a preschool center operated by another agency or private owner.

The sample consisted of five pairs of community colleges which were randomly selected. Pairing of schools was based upon student enrollment figures. One of the schools in each pair trained students at a college operated preschool laboratory and the other school trained students off campus at a preschool center operated by another local agency or private owner.

Three hypotheses were tested stating that there would be no significant difference between the knowledge levels of the two groups of students, nor between the ratings of quality of the on-campus and off-campus training facilities, nor would association be indicated between the preschool environment ratings and the student scores on the knowledge test.

The Harms and Clifford Early Childhood Environment Rating Scale (1980) was used to determine the level of quality of the preschool facilities, and an adapted form of the Child Development Associate Assessment Test was used to test the student knowledge.

The mean total knowledge test score for students trained on campus was 199.02 and for students trained off-campus, 194.56. There were 240 possible points on the test. The mean total score for the environmental rating of on-campus preschool training laboratories was 202 compared to 187.80 for off-campus preschool centers, out of a possible 259 points.

Analysis of the data resulted in finding no significant differences between the environmental ratings of on-campus and off-campus centers, nor between the knowledge test scores of the two groups of students. No association was found to exist between the knowledge test scores and the environmental ratings of the preschool classrooms where training had occurred.

ACKNOWLEDGEMENTS

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CHAPTER I

INTRODUCTION

Day care for preschool children is not a new phenomenon in the United States. It has been needed and has been available in varying degrees for the past 90 years, according to Fein and Clarke-Stewart (1973). During the last two decades, there has been a dramatic shift in the way parents in this country care for their children. This shift has been away from care provided in the home to care provided outside the home. The rates of change were estimated by Lueck and Orr (1982) to be from 55% of preschool children in 1955 receiving care outside the home in 1955 to 62% in 1980. The societal influences which have contributed to this change are higher rates of maternal employment, family mobility, changing values regarding the role of women, and the need for help in child care from persons other than members of the family.

Day care today touches the lives of many young children. Ruopp (1979) reported that 900,000 children--infants, toddlers and preschoolers--are enrolled in approximately 20,000 child care centers across the nation. This figure does not include the children who receive care through individual arrangements or in day care homes.

In North Carolina, according to the Office of Child Day

Care Licensing, 66,954 children were served in 1,897 day care centers in November, 1977. The number served has increased so that as of November, 1982, the number had risen to 83,137 children in 2,248 centers. This change represents a 24% increase over the 5-year period.

The overall increase in national maternal employment has grown from 15% of the workforce in 1955 to 50% in 1980 (U. S. Dept. Labor, 1980). It has been due to a number of influences, such as a need for increased income for the family with two parents present in the home, and for both income and care resources for the single parent family which now comprises 20% of all families with children in the United States.

In North Carolina, it is estimated by the Department of Commerce that fully 52% of mothers with preschool-aged children work outside the home. Some provide for their child care needs by enrolling their child or children in a day care center, while others may rely upon a day care home. Still others will call upon a relative to help, or on a neighbor or friend to watch their young children. Unfortunately, others may leave the children unattended.

Escalona (1981) highlighted the need for day care services in today's society with an emphasis on the need for infant day care. The need for high quality care was emphasized because of its potential effects on children's mental health. Millar (1980) sought to answer the question, "Who

is looking after the children?" in Canada, and produced answers which were similar in rate and trend to those found in the United States.

The number of child care centers, as has been reported, has grown to partially accommodate this need. Center growth carries with it an increased need for persons to staff the facilities. Some research in this area has reported that center operation is likely to be of a higher level of quality when the staff is trained in a child-oriented or child-related field (Ruopp 1978).

Interest in and study of day care has, therefore, been stimulated by the growth which has occurred in need and use of day care services. It is reflected in reports of studies and in discussions in articles which have been published in both professional publications and popular magazines. Articles on topics such as choosing the day care that is best for you (Brazelton, 1982) and how to start a day care center operation ("Day Care", 1981) were located. Investigations of the influences which day care may have upon young children can be found in professional references. The National Day Care Study conducted by Abt Associates (Ruopp, 1978) is an example of a recent attempt to investigate the impact that day care is having on the development of preschool children in the United States.

The purpose for conducting this study was to gain information about selected aspects of day care staff

training and the results of such training. The North Carolina Community College system offers programs of study in day care. These constitute one form of response to the need for trained day care staff. Such programs are currently offered at 24 institutions in the system. In these programs students receive practical training with methodological underpinings. The study was designed to provide insight into what prospective staff know about preschool programing and practice as a result of their training.

There has been a trend in the North Carolina community college system toward developing on-campus preschool laboratory training facilities. There are currently 14 community colleges or technical institutes that operate an on-campus preschool program and 10 that place students in off-campus centers for their training. Reasons that have been given by center directors for the development of these facilities focused on the opinion that overall quality of the campus programs surpasses that of the programs in the community. This opinion has not yet been tested. To date, based upon information secured from the North Carolina Dept. of Community Colleges by this investigator, there has been no comprehensive investigation of the laboratories operated by the individual institutions (See Appendix A).

Another reason for conducting the study was related to economics. Whereas the individual schools must apply to the Department of Community Colleges for permission to offer

the Early Childhood Specialist curriculum, no permission must be secured in order to plan and develop laboratory facilities. Such facilities are developed at the local level. Even though such decisions are made locally, their effects do have impact upon other institutions within the system through the expenditure of funds for construction or renovation and for equipment and supplies. The colleges must, of course, continue to support the laboratories by providing overhead, utilities, and perhaps, varying percentages of the center teachers' salaries.

In the present days of reduced budgets and increasing costs, it is important to gain insight into whether the laboratories are contributing to the accomplishment of the desired outcomes. Do the laboratories deserve continued support for development and operation? Some schools within the system have decided to abandon either the curriculum or the laboratory or both, due to financial difficulty. Sampson Technical College, Clinton; Sandhills Community College, Carthage; and Stanley Technical College, Albemarle, did so during the 1981-82 school year. Information gathered through the study would provide direction in the discussion and resolution of issues such as the quality and impact of preschool laboratories on student training for work in the field of child day care.

Purpose of the Study

The overall purpose of the study was to assess student knowledge of preschool programing and practice. Students were those enrolled in the second year of the Early Childhood Specialist program of study within the North Carolina community college system. Toward this end, the study proposed:

1. To compare the classroom environments of on-campus preschool laboratories with the classroom environments of off-campus preschool centers used for training Early Childhood Specialist students.
2. To compare the level of knowledge of preschool programing and practice in Early Childhood Specialist second-year students who have received training at either on-campus or off-campus training sites.
3. To examine the relationship between the level of knowledge in students receiving training on or off campus with the classroom ratings of on or off-campus training locations.

Hypotheses

The following hypotheses were tested.

1. There will be no differences in the total score and subscale ratings of classroom environment

between on-campus and off-campus preschool training facilities.

2. There will be no differences in the knowledge of preschool programing and practice in Early Childhood Specialist second-year students receiving training on-campus or off-campus as reflected in total scores and as subscores.
3. There will be no relationship between the ratings of classroom environment where students received training and their scores on the knowledge test of preschool programing and practice.

Limitations of the Study

This study was limited to second-year students in Early Childhood Specialist curricula at colleges and technical institutes in the North Carolina community college system. For this reason, results are reflective only of these students, their knowledge and aspects of their training in the Early Childhood Specialist curriculum. Results should not be taken as grounds for discussion of students enrolled at any other institutions of higher education.

The study was further limited in focus and discussion to training locations at which Early Childhood Specialist students receive practical training as a portion of their education.

Definition of Terms

Definitions for the following terms used in the study were taken from Thesaurus of ERIC Descriptors (1982).

Day Care: care of children by persons other than their parents or guardians on a partial or full-day basis (p.61).

Day Care Center: a facility that cares for groups of children on a partial or full-day basis (p.61).

Child Caregiver: a person who provides care for children. This may be a professional person, a non-professional, parent,or other family member (p.34).

Child Development Center: an educational facility for preschool children in which cooperation of family, community, and professional staff contribute to the total development of the child which may provide health and family services (p.34).

Child Development Specialist: a person whose professional training has prepared him or her to know and possess skill to work with children and the changes that take place in them as they develop from birth to maturity (p.34).

Early Childhood Education: activities and experiences

that are intended to facilitate developmental change in children from birth to 8 years of age (p.71).

Environment: Surrounding conditions and influences of the physical location capable of having impact on an organism (p.83).

Laboratory: facility specifically designed and equipped for demonstration, experimentation, practice and research in a field of study (p.131).

Practicum: supervised academic exercises consisting of study and practical work (p.185).

Preschool Education: activities and experiences that are intended to facilitate developmental change in children from birth until entrance to kindergarten - about 5 years of age (p.186).

Programing: putting together a sequence of activities and procedures directed toward desired results (p.190).

CHAPTER II

REVIEW OF THE LITERATURE

A survey of current literature was conducted to identify research which could provide guidance and direction for this study. The following subject areas were surveyed: (1) child day care, (2) preschool teachers and day care staff, (3) preschool programs, (4) community college program evaluation.

Child Day Care

Child day care refers to care provided to children for a portion of or for the full day by persons other than their parents. In the U. S., the trend toward greater reliance upon child care services has grown markedly during the past two decades as a greater proportion of mothers have sought employment outside the home. Today it is estimated that 50% of the mothers with preschool-aged children use day care.

Day care was not unknown in the U. S. prior to the 1960's. It was needed during times of national distress, such as the Great Depression and World War II. Fein and Clarke-Stewart (1973) referred to day care as "...a sensitive barometer of national crisis" (p.11).

Segal's work (1981), typical of the focus on the need for child day care outside of the home, included

descriptions of the number of parents working in the U. S. by family structure, mothers' work and their need for child day care, and parent knowledge about day care. The number of working mothers with day-care-aged children is included in data released periodically by the U. S. Dept. of Labor (1980).

Research on child day care also has focused on descriptions of standards of operation. A summary of standards from a national perspective has been produced by the Committee on Child Development Research (1981).

Bronfenbrenner (1981) recently called for studies of what constitutes the full range of day care arrangements used by parents of young children. In addition, it was believed that more needs to be known about parental preference in types of day care. Steinberg and Green (1979) surveyed parents to learn what they looked for in day care arrangements and found affordable cost and a friendly staff were the factors they considered. Belsky (1978) also focused on the family by asking what the effects of day care were on the functioning of the family. The costs of not having day care were also examined in terms of loss of income and of home schedule disruption.

Bradbard and Endsley (1978) developed a checklist for parents to use when rating various day care centers in their search for one to their liking. The categories for rating were similar to those found in the Child Development Associate functional areas. The categories included health

and safety, physical space, equipment and supplies, daily schedule, activities and communication with the children's parents. Results of a field test of the checklist indicated its usefulness.

Belsky and Steinberg (1978), Fowler (1978) and Smith (1979) have reviewed the research on the effects of day care on children and found that although the number of studies conducted has increased over the past 10 years, the information which has resulted has been limited. Examples of studies which have focused on effects of day care are those dealing with children's cognitive development, their attachment, their social growth, language use and comprehension and play. However, the area focusing on the training of knowledgeable and effective day care staff is one that continues to need study.

The National Day Care Study (Ruopp 1979) was initiated in 1974 by the Administration for Children, Youth and Families. Its purpose was to gather information from across the nation in order to learn about certain aspects of child day care service and impact. Specifically, it focused upon staff/child ratios, staff qualifications, educational program and physical environment of the centers. One hundred and twenty day care centers, 1800 children and 1000 of their parents were personally surveyed. In addition, 3100 centers were selected for inclusion in a telephone survey.

Results indicated that in order to facilitate develop-

ment in young children, at least one staff member serving in each classroom should have specialized preparation in a child-oriented field. Formal education of the staff was found to have strong effects on the climate and behavior of the children in the classroom. Behavior of the staff who had been trained was studied and was seen to include more examples of planned teaching activity, social and verbal interaction with the children and more positive methods of group control.

Clarke-Stewart (1977) is another researcher who has emphasized the need for "...responsive, stimulating, involved and reliable..." child care staff in order to provide "...good quality child care arrangements" (p.132). It was recommended that specific limitations on the number of children and caregivers in a group be established at the federal and state levels. In groups wherein the staff/child ratio was low, more child emotional distress could be observed, there were more frequent conflicts between children, and there was less time spent by the teacher in presenting planned activities to the children or simply talking with them. Such results are important because they punctuate the need for trained staff as well as a high quality environment in attempting to provide quality child care. It did not, however, give attention to classroom equipment.

Preschool Teachers and Day Care Staff

Many studies of preschool teachers and day care staff can be located in the literature. One of the trends is the study of the effects of specific types of teacher behavior or teaching method on the development of the young children. Phyfe-Perkins (1981) found that the effective teacher of young children is encouraging, uses positive types of instruction and responses, is involved with children's activities and is, overall, child-centered in teaching approach. McGuiness and Ramey (1981) found that staff can facilitate development in language usage by serving as a verbal communication model by listening with interest, and by responding enthusiastically to a child's verbalizations and by prompting with words when a child is unable to express precisely what he wants.

Other examples of studies are the works of Barbour (1976) on teacher behavior and the child's verbal language development, Kamm (1975) on the development of the child's prereading skills, Gold (1977) on male teachers and nursery school children's mathematical understanding, and Stephens (1980) on preschoolers' development of academic achievement motivation. The potential influence of a knowledgeable staff was the focus of Goodman's study (1981) when he found that children's thinking development was greatly enhanced through their participation in well-planned, thought-provoking activities presented by staff in the preschool classroom. Beker (1979)

has supported the credentialing of preschool and child care staff in order to insure competence in persons who work with preschool children.

Preschool Programs

Use of the term "quality of environment" can be found in the literature on preschool programs. In an attempt to clarify its meaning, Maier (1979) listed and explained the core elements of the day care environment which need to be provided. The elements range from physical comfort and personal space to adult dependability, predictability and responsiveness, to staff skill in developing and maintaining the environment. He further stated that staff needs opportunities for personal development. Based on these observations, the staff comes into focus as a key element in providing day care service.

Falender and Mehrabian (1979) mentioned that quality of a child day care center can be evaluated in terms of its color scheme, lighting intensity, temperature, equipment, and activities. The approach and avoidance behavior of the enrolled children was studied. It was hypothesized that higher quality centers would be associated with less child separation anxiety, more physical exploration of the environment, less stranger anxiety and higher levels of cognitive development in the children.

Studies of the types of preschool programs and their results in terms of the children's behavior and development can be located. Examples of this type were strongly influenced and supported by the federal government's involvement in promoting preschool education as a weapon against poverty in the early 1960's. Recognizable names such as Weikert (1971), Nimnicht (1971), Gordon (1971) and Bushell (1971) were involved in developing program variations for Head Start. Each of the researchers' programs had a particular focus such as Weikert's cognitively oriented curriculum or Gordon's interest in working with parents to teach them how to stimulate their children's development.

Other researchers such as Campbell and Ramey (1977) followed in a similar direction by studying the effects of early intervention on specific aspects of development such as intellectual skill. Another, Kischke (1977) looked at play and curriculum and child development. Hick (1977) focused on how the preschool enhanced cognitive development.

A different trend in preschool program research was the work of Tomasello (1980) on characteristics of children and their needs in a planned environment. It was found that preschool children benefited from having activities presented to them in a carefully planned environment. Lawton (1978) found that preschool children were more successful in solving specific thinking problems and Johnson (1980) found

that preschool children were more productive in construction play, when they were involved in a formal framework educational program in a carefully planned classroom, than when the preschool children were in a free-play discovery-oriented program.

Lane and Thornberg (1981) learned that there were observable differences in children's socio-dramatic play when teachers did and did not supply props to stimulate the children. Teachers' suggestions and the use of props resulted in a higher child involvement in activity with other children. The physical environment of the classroom was also observed by Van Horn (1981) and it was found that predominant color in the classroom was positively related to the amount of noise produced by the children.

Focus on room arrangement and selection of equipment was recommended by Day and Sheehan (1974), who studied quality and determined that it was influenced by physical arrangement of equipment, the use of space, the availability of a diverse array of materials, and the kind and amount of adult-child interaction. According to Nash (1981), 4- and 5-year old children accomplished more learning in number concepts, oral language use, prereading skill and comprehension and had an increase in their creative production, when the preschool classroom was organized in terms of careful spatial arrangement and material selection.

In looking at the quality of the environment of a child care center and its influence on child or caregiver attachment, Anderson (1981) determined that the amount and adequacy of equipment, existence of a daily program plan and the degree of the program's child-centeredness sets the baseline for the child and caregiver contact and its accompanying quality. Belsky (1980) observed that the activity areas in a day care classroom including play materials and equipment, as well as the psychological milieu of the center, deserved study because little previous work had been done and because the effects of the day care environment on child development need to be known.

Community College Program Evaluation

Research related to the community college has focused on styles of administration, faculty salary and tenure issues, curriculum methodology, and program evaluation. Muriel (1982) studied the goals of administrators of community colleges as well as the models of management used. Studies of students have looked at the characteristics of students, and the two year college attrition rate (Friedlender 1982, Zwerling 1980, Creamer 1980).

Studies of faculty have looked at salary structure and tenure issues. Bowers and Breuder (1982) gathered information on the reasons faculty think tenure is needed and how 2-

year college faculty are usually as well paid as counterparts in 4- year institutions. Bagwell and Elioff (1982) investigated the need for faculty development in 2- year schools. Middleton (1982) determined that 2- year schools need development officers and need to hold fund drives in these economically difficult times.

Cherdack (1979) recommended that research on program development and educational program results be carried out by the community colleges. The evaluation of program effectiveness must go beyond the currently used approach of equating graduate employment rates with educational program success. Similarly, Richardson (1981) stated the importance of program evaluation. It was believed that all issues confronting the community colleges in the 1980's will be related to institutional quality. Each institution must strive to be the best that it can be in order to be competitive with other institutions in attracting students to it.

Brown and Manley (1973) in an early article on program evaluation for community colleges, argued for the place of institutional research in the colleges in order to insure progress in the provision of quality educational programs. Evaluative research can support the continuation or change or termination of a program of study. Formative evaluation should also be conducted to give feedback to the practitioners along the course of the program.

Borland and Harris (1975) realized the importance of evaluation. They stated that program evaluation should go beyond employment statistics to an evaluation of program knowledge acquisition and use. It was recommended that instrumentation provide information that would prove useful for curriculum revision. A product assessment which could be compared to accepted occupational standards was a suggested procedure.

According to Brown and Manley (1973), appropriate forms of occupational education research aimed at improving instructions included the study of knowledge of content necessary to do a job and study of the tasks associated with each occupation. In 1971, 13 projects were authorized by the North Carolina community college system to study (1) institutional planning for offering programs of study, (2) instructional innovation such as individualized instruction, (3) guidance functions such as student skill assessment at the time of enrollment, and (4) how results can best be shared with program personnel at other institutions.

Clowes (1981) stated that the trend of state community-college program evaluation which could be identified over the past 10 years has changed. In the early 1970's, program evaluation focused on justifying the development and expansion of new programs in their institutions. Currently, it focuses on quality, viability, and continued need for existing programs. The means of determining

this is through evaluation of the quality of instruction and student career development. Green (1981) supported discussion of the change in trend.

Summary

The literature survey provided the basis for drawing several conclusions. First, the need for child day care outside the home is present, likely to continue, and likely to increase. The need for staff to care for children will correspondingly continue and increase. Second, studies of child care staff have demonstrated the effects that teachers can have on child development. Therefore, the public needs knowledgeable teachers who are aware of how their behavior can influence children. Third, studies of characteristics of children and conditions under which they learn have aided staff in planning for meeting the developmental needs of children in an organized manner. Fourth, the quality of the preschool environment has been studied as a factor which can influence child development. Therefore, it is in the best interest of the children served, to develop and maintain high quality environments in the facilities providing care for children.

No studies have been located which directly addressed the questions posed by this study. Results of the proposed study could contribute to the field of training of staff for child day care by indicating the conditions under which

effective training can take place and to determine the extent of knowledge of preschool programing and practice held by child day care staff.

CHAPTER III

PROCEDURES

A discussion of the procedures followed in the study is presented in this chapter. Focus is directed toward design of the study, a description of the subjects and the sampling methods, data collection procedures, and data analysis.

The overall purpose of the study was to assess the knowledge of preschool programing and practice in second-year Early Childhood Specialist students who had received practical training in either on-or off-campus preschool centers. The design was essentially ex post facto because exposure to the location of laboratory training took place prior to the study. The variables included in the study were location of the preschool training site (on-campus or off-campus), student knowledge of preschool programing and practice, and quality of the classroom environment of the preschool programs where training occurred.

Subjects and Sampling Method

The Early Childhood Specialist curriculum is one of the technical programs of study that may be offered by member institutions of the North Carolina community college system. The curriculum is currently being offered by 24 institutions in the system.

The curriculum is chosen by the individual seeking to prepare for employment as a teacher in child care, private or public nursery school, Head Start, or as an assistant in a public kindergarten. The program is also chosen by employees in the field who seek staff development opportunities. The student who successfully completes the program will be awarded the Associate of Applied Science degree.

Throughout the program, the student has regularly scheduled opportunities to observe, interact with, plan, and present activities to groups of young children. This practical experience is an important component of the student's training. It permits the student to integrate theory and methodology, develop and refine practical skills, and make a determination of the appropriateness of the choice of field of study.

Locations for the practical portion of the student's training vary from campus to campus, but the types of locations are constant across schools. They are either off-campus in places such as child care centers or nursery schools, or on-campus in a college-operated preschool laboratory.

A list of institutions within the community college system which offer the Early Childhood Specialist curriculum and which maintain and operate a preschool laboratory on-campus was compiled during a telephone survey

Program enrollment figures for the 1981-82 academic year were secured from the North Carolina Department of Community Colleges. It was assumed that figures for 1982-1983 would be comparable. Another preliminary step was to contact the community colleges offering the Early Childhood Specialist curriculum to secure printed copies of their curricula in order to permit comparison of course names, credits, and content. Based upon this survey, it was determined that courses studied by the students in the various community colleges were similar in number and focus. Courses included principles of human development, preschool methods and materials, selection and use of equipment and supplies, discipline, group management, and content areas such as language arts, music, creative arts, and physical activities.

The sampling frame for this study included all schools in the North Carolina community college system which offered the Early Childhood Specialist curriculum. The student enrollment figures for schools offering the curriculum during 1981-82 school year served as a basis for matching schools, those having on-campus preschool laboratory facilities and those not having on-campus preschool laboratory facilities. The pairing process produced the following nine pairs of schools:

Number of Students	Schools with Laboratory	Schools without Laboratory	Number of Students
		Isothermal	6
9	Pitt	Pamlico	13
24	Montgomery	Surry	20
31	Davidson	Caldwell	35
31	Beaufort		
36	Blue Ridge	Mayland	37
45	Piedmont	Forsyth	47
53	Southeastern	Wilson	54
64	Gaston	Roanoke-Chowan	63
65	Guilford	Southwestern	73
83	Vance-Granville	Durham	78
89	Alamance		
107	Wilkes		
122	Rowan		
156	Central Piedmont		

Each of the pairs was assigned a number from one to nine. Then using a table of random numbers, pairs were chosen until no less than 100 students and no fewer than 5 pairs of schools were chosen for inclusion in the study. One of the ten colleges selected declined to participate claiming lack of time to allow the testing of students. A replacement college with the closest student enrollment was chosen from the same group of colleges.

Instrumentation

Two instruments were chosen for use in this study. The Early Childhood Environment Rating Scale developed by Harms and Clifford (1980) was used to rate the classroom environment of the preschool classrooms used as training sites for the Early Childhood Specialist students. It is a 37-item scale covering seven aspects of preschool environment: (a) personal care routines, (b) room arrangement and equipment, (c) language and reasoning experiences, (d) fine and gross motor activities, (e) creative activities, (f) social development opportunities, and (g) provision for parent and staff needs.

Each of the 37 items is rated by circling a number on a Likert-type scale from 1 to 7, with 1 representing a rating of minimal quality. Total possible scores range from 37 points, indicating minimal quality, to 259 points, indicating excellent quality.

The instrument was field tested for both validity and reliability in Durham, N. C. and St. Louis, Mo. (Harms and Clifford, 1980). To determine validity, all items were rated for their importance in early childhood education programs by experts from the field of day care and early education. Results of the ratings indicated that 78% of the ratings supported the belief that the aspects selected for the rating scale were of high importance when considering environmental

quality. In addition, the scale was used to distinguish between classrooms of different levels of quality which had been identified as representative of a certain level of quality prior to ratings completed by other expert observers. A rank order correlation of .74 was obtained.

In order to determine the level of reliability of the instrument, interrater agreement was estimated for ratings of the same as well as of other classrooms. Rank order correlations of these ratings were .89 and .79, respectively (Harms and Clifford, 1980, p.38).

The second instrument was a cluster-type true-false test that was adapted from the Child Development Associate (CDA) Competency Assessment Test. The original instrument contained more than 200 multiple-choice items and was developed by the Early Childhood Development Division of the Texas Department of Community Affairs (1977). It covered knowledge of preschool programing and practice including (a) center safety, (b) child health, (c) organizing space and equipment, (d) solitary and group learning, (e) material selection and (f) use, (g) language development, (h) comprehension, (i) self-image and (j) relationships with parents. For purposes of this study, the instrument was condensed to 60 multiple-choice items due to the length of the original instrument and duplication of item focus within the test.

This adaptation of the instrument was pilot tested at the University of North Carolina at Greensboro in a graduate-level class of 35 students in the Department of Child Development and Family Relations. Results indicated the length was acceptable but the response format needed revision because there was more than one correct response for most of the multiple-choice questions. The final adaptation was a cluster true-false test.

Each question was responded to by circling either T or F for each completion choice thereby indicating whether it was true or false. Total possible scores ranged from 0 to 240 points for the 60 questions, with 240 points indicating the respondent had a high level of knowledge of the content.

The competency areas included in the test were determined by approximately 1200 professionals from the fields of early childhood education and child care workers. The Child Development Associate Consortium in Washington, D. C. conducted this development phase of the CDA assessment process. It accepted those statements of function which received ratings of being very important from 75% of the professionals rating them. Currently 17 states in the U. S. have included the functional areas and their assessment as a part of their day care licensing regulations (Pettygrove, 1981).

The national CDA effort, which has been in existence for nearly a decade, has provided guidance in the

description of areas of quality operation in early childhood education. In turn, these identified areas have provided focus for curriculum development in some areas of higher education. The curricula of member institutions of the North Carolina community college system that offer the Early Childhood Specialist curriculum were surveyed to determine whether or not they had an instructional focus in common with the areas of competency present in the assessment test. On the basis of that survey, it was concluded that the test had content validity for use in this study.

Data Collection Procedures

Visits were made to the selected schools by the investigator to collect data. A time schedule of dates for visits was developed to cover the time period of January 3, 1983 to March 11, 1983. Early Childhood Specialist department heads were contacted to determine times that second-year students would be on campus, as well as to determine the locations of off-campus preschool centers used for student practicum.

During the visits, two tasks were accomplished: (a) students were given the opportunity to anonymously respond to the knowledge test and (b) on-campus or off-campus preschool training sites were observed.

The knowledge test was administered to the students by the study investigator during a regular class period.

Explanation of the overall purpose of the study was given to the students at that time.

Community college instructors at colleges where student training was done off campus were asked to identify the preschool centers where their students received training so that the investigator could contact them to request permission for the rater to visit the centers. In no cases were the directors unwilling to allow a visit. Except for the college substitution mentioned earlier, all persons involved in the study seemed willing to participate and happy to have visitors from another college in the state system.

The training of two raters who were preschool teachers was done by the study investigator in preschool classrooms. This was completed prior to the observation visits. It included practice observations in the classrooms until a minimum of 95% agreement between the ratings of the classrooms was attained. Once the acceptable level of agreement was achieved, either rater was prepared to rate independently. This procedure provided one rating of each preschool classroom visited.

The environmental rating was made by one of the trained raters who was accompanied on the center visit by either the director, lead teacher or owner of the center. The task was explained to that person by the rater in a general statement to eliminate concerns they may have had about being involved in a study in their classrooms.

Data Analysis

The knowledge test answer sheets from each college were numbered with Arabic numerals from one to that group's total and were scored by the investigator as soon as possible after the test date. Individual student total scores and subscores and group mean subscale scores for the ten subscales of the knowledge test were computed and were recorded on the form (Appendix B). This served two purposes; it was a group result storage method and it served as a reporting form to send to the college of origin to present student results. After all college groups had been tested and all preschool centers had been rated, mean total and mean subscale scores were computed for the two instruments. A *t* test was used to compare scores of quality of on-campus preschool laboratory classrooms with scores of quality of off-campus preschool classrooms. Scores of knowledge of preschool programing and practice of students trained on and off campus were compared with analysis of variance. Relationships between the specific areas of focus of the knowledge test and classroom environment rating scale were examined by use of correlation coefficients. The .05 level of significance was used.

CHAPTER IV

ANALYSIS OF FINDINGS

The purpose of the study was to assess knowledge of preschool programing and practice in Early Childhood Specialist second-year students who were enrolled in lege or technical institute of the North Carolina community college system during the winter term of the 1982-83 academic year.

All students studied college coursework and participated in practical training as a part of their education. The practical training took place for students of some colleges at an on-campus preschool laboratory while for others it occurred at an off-campus preschool center which was not operated by the college where they were enrolled.

Data were collected from two sources. The first source was Early Childhood Specialist second-year students enrolled in the randomly selected member institutions in the North Carolina community college system. The students were those who were in their second year of study and also within approximately one term of completing the curriculum. Each student completed the adapted Child Development Associate Assessment Test which provided a measure of knowledge of preschool programing and practice.

The second source of data was the preschool laboratory

or center used for practical experience and training of the college students. Ratings of the quality of the classroom environments using the Early Childhood Environment Rating Scale provided scores for each training site in the sample.

Results of the study are presented in the following sections: a description of the participants, a descriptive summary of the data, statistical analysis of the hypotheses, and a discussion of the findings.

Description of Participants

The Early Childhood Specialist second-year students who responded to the knowledge test of preschool programing and practice were females ranging in age from 18 to 37 years. All persons were enrolled as students in a community college or technical institute of the North Carolina community college system.

In terms of geographic location, the three major regions of North Carolina were represented in the sample. Two colleges were studied in the western mountain area, four in the Piedmont and four in the coastal plain. Each of the regions included college facilities in both urban and rural communities. The total number of students in each region is presented in Table 1. The number of students trained on campus was 55 and the number trained off campus was 38.

Table 1

Geographical Location of Students

Community College	North Carolina geographical region		
	Mountains	Piedmont	Coastal Plain
A	14		
B	5		
C		9	
D		17	
E		9	
F		6	
G			8
H			10
I			6
J			15
Total number of students tested	19	41	39

Descriptive Summary of the Data

Student knowledge was tested by using the adapted Child Development Associate Assessment Test, a 240-point cluster true-false test. Those taking the test were instructed to circle either T or F for each of the four completions for every question. There were ten subsections in the test which focused on (K1) center safety, (K2) child health, (K3) organizing space and equipment, (K4) solitary and group learning, (K5) material selection and (K6) usage, (K7) language, (K8) comprehension, (K9) self-image, (K10) relationships

with parents. The total number of points for each of the subscales varied from 8 to 40 points.

The mean total score for the student group trained on-campus was 199.02 compared to 194.56 for the off-campus trained group. Knowledge mean scores for both on and off-campus groups are reported in Table 2. The range of mean total scores was 16.92 points for the on-campus group spanning scores from 203.82 to 186.90. Mean total scores for students trained off-campus ranged 22.0 points from a high of 209.0 to a low of 187.0.

Table 2

Mean Knowledge Test Total Scores as a Percentage of Total Possible Score for On-campus and Off-campus Trained Student Groups

Location of Preschool Facility					
On-campus			Off-campus		
College	Mean total scores	Percentage of total possible score	College	Mean total scores	Percentage of total possible score
A	203.82	84.92	F	209.00	87.08
B	202.07	84.20	G	201.44	83.93
C	199.12	82.97	H	197.33	82.22
D	198.56	82.73	I	188.33	78.47
E	186.90	77.88	J	187.00	77.92
Total	199.02		Total	194.56	

Mean subscores are shown in Table 3. In nine of the ten subscales, mean scores for the student group trained on-campus were slightly higher than those of the off-campus trained group. Overall, students received high scores on knowledge of relationships with parents, which would include knowing how to help parents feel a part of the preschool operation and activities parents could do with their children at home.

Students also scored high in knowledge of rationale and techniques for helping children develop a positive self-image, in knowledge of preschool classroom material usage, and in knowledge of child health. In contrast, students of both groups scored lower in knowledge of preschool classroom safety which covers understanding of the reasons for keeping a preschool classroom hazard free, in knowledge of organizing classroom space and equipment, and in knowledge of methods and techniques of facilitating learning in groups as well as for the individual child.

Table 3

Mean Knowledge Test Subscores as a Percentage of Total Possible Score for On-campus and Off-campus Trained Student Groups

Subscale	Total possible score	Mean scores		Percentage of total possible score	
		On-campus	Off-campus	On-campus	Off-campus
Safety	24	18.28	17.85	76.17	74.38
Health	40	34.63	34.39	86.58	85.98
Space	20	15.72	15.36	78.60	76.80
Learning	40	31.72	30.95	79.30	77.38
Selection	24	19.12	18.85	79.67	78.54
Usage	8	7.14	6.83	89.25	85.38
Language	24	20.17	19.68	84.04	82.00
Comprehen.	28	23.62	22.90	84.36	81.78
Self-image	20	17.90	17.00	89.50	85.00
Parents	12	10.71	10.73	89.25	89.42
Total score	240	199.02	194.56	82.92	81.07

A relative frequency distribution of knowledge test mean total scores for on and off-campus trained student groups is presented in Table 4. The range of mean total scores appears to be similar for both groups but the on-campus group had 80% of its mean scores in two upper intervals of the range and 20% in a lower interval while the off-campus group had only 60% in the same two upper intervals and 40% in the same lower interval.

Table 4

Relative Frequency Distribution of Knowledge Test Mean Total Scores of Students Trained On or Off campus

Knowledge test intervals	Frequencies		Relative frequencies	
	On-campus	Off-campus	On-campus	Off-campus
230-240	0	0	0	0
220-229	0	0	0	0
210-219	0	0	0	0
200-209	2	2	.4	.4
190-199	2	1	.4	.2
180-189	1	2	.2	.4
0-179	0	0	0	0
Total	5	5	1.0	1.0

The quality of the preschool training site classroom environment was rated using the Harms and Clifford Classroom Environment Rating Scale. A trained observer/rater recorded scores for seven areas of focus in the classroom. These were: (E1) personal care routines, (E2) furnishings and display, (E3) language and reasoning experiences, (E4) fine and gross motor activities, (E5) creative activities, (E6) social development, and (E7) adult needs. The maximum number of points for the scale was 259.

Table 5 presents the results of the environment rating as total scores for on-campus and off-campus preschool training facilities. The range of scores for on-campus centers was 38 points, from a high rating of 213 to a low of 175. For the off-campus centers, the range was 59 points from 219 to 160. The mean total score for on-campus preschool training facilities was 202.00 contrasted to 187.80 for off-campus preschool training facilities.

Mean scores for the seven subscales of the environment rating were calculated and are presented in Table 6. In all seven subscales, the on-campus preschool laboratories received slightly higher ratings than did the off-campus preschool centers. Overall, the preschools received good ratings for personal care routines, which includes giving children help in regularly attending to their personal hygiene. Language and motor activities also received good ratings, generally.

Table 5

Environment Rating Total Scores for On-campus and Off-campus Preschool Training Facilities

Location of Preschool Facility					
On-campus			Off-campus		
Center	Total score	Percentage total score	Center	Total score	Percentage total score
A	213	82.24	F	219	84.56
B	210	81.08	G	197	76.06
C	210	81.08	H	187	72.20
D	202	77.99	I	176	67.95
E	175	67.57	J	160	61.78
Total	202.00	77.99		187.80	72.51

In contrast, the preschools were rated lower in providing for adult needs at the center. This included not having a place for adults to store their personal items or not having a lounge or rest area for adult staff. Overall, the centers were also rated lower in types and condition of furnishings of the center, in having a variety of creative activities available for the children, and in providing materials which stimulate children's social development.

Table 6

Environment Rating Mean Subscale Scores as a Percentage of Total Possible Subscale Score for On-campus and Off-campus Preschool Training Facilities

Subscale	Total possible score	Mean scores		Percentage of total possible score	
		On-campus	Off-campus	On-campus	Off-campus
Personal	35	28.60	25.60	81.71	73.14
Furnishings	35	26.80	24.60	76.57	70.28
Language	28	24.20	21.20	82.86	75.71
Motor	42	33.80	31.40	80.48	74.76
Creative	49	37.40	36.00	76.33	73.47
Social	42	31.60	30.40	75.24	72.38
Adult	28	20.70	18.60	73.93	66.43

Statistical Analysis

The purpose of this section is to report the testing of the hypotheses of the study. Statistical procedures used were the *t* test, analysis of variance, and correlation.

Hypothesis One

The first hyposthesis stated that there will be no differences in the total scores and subscore ratings of classroom environment between on-campus and off-campus preschool training facilities. The data collected through use of the Harms and Clifford *Early Childhood Environment Rating Scale* were used to rate the environments used as training sites for the Early Childhood Specialist students. Each rating yielded seven subscores, one for each of the focus areas of the instrument, as well as a total score. Two sample *t* tests for the mean subscores and for the mean total scores were calculated to determine whether or not a significant difference existed between the environmental ratings of on-campus and off-campus preschool training facilities. As shown in Table 7, the differences were not statistically significant. Therefore, the hypothesis was not rejected.

Table 7

T Test Values for Early Childhood Classroom Ratings of On-campus Compared to Off-campus Preschool Training Facilities

Subscale	Group	Mean	t value	Probability
Personal	On	28.60		
	Off	25.60	-1.56	.16
Furnishings	On	26.80		
	Off	24.60	- .81	.44
Language	On	23.20		
	Off	21.20	-1.46	.18
Motor	On	33.80		
	Off	31.40	-1.70	.13
Creative	On	37.40		
	Off	36.00	- .63	.55
Social	On	31.60		
	Off	30.40	- .50	.63
Adult	On	20.60		
	Off	18.60	- .94	.37
Total	On	202.00		
	Off	187.80	-1.17	.28

Hypothesis Two

The second hypothesis stated that there will be no differences in the knowledge of preschool programing and practice in Early Childhood Specialist second-year students receiving training on campus or off campus, as total scores or subscores.

A cluster true-false knowledge test of preschool programing and practice adapted from the Child Development Associate Assessment Test was used to collect data for the testing of this hypothesis. The instrument yielded a total score as well as ten subscores. One-way analysis of variance was employed to determine whether mean total scores or mean subscores were significantly different for Early Childhood Specialist students who received training on campus from those who received training off campus. Again, no significant difference was found, and the hypothesis was not rejected. The results are presented in Table 8. Although not statistically significant, the content area of center safety approached significance with the on-campus students scoring higher than did the off-campus students.

Table 8

ANOVA for Knowledge Test Scores for Students Trained On-campus and Off-campus

Subscale	Source of variance	df	SS	F	Prob.
Safety	Group	1	3.5432	4.11	.0771
Health	Group	1	4.8758	.43	.5299
Space	Group	1	2.3255	.01	.7548
Learning	Group	1	.5371	.13	.7314
Selection	Group	1	.1107	.00	.9455
Usage	Group	1	1.1197	.98	.3512
Language	Group	1	2.1409	.41	.5377
Comprehen.	Group	1	.1664	.01	.9322
Self-image	Group	1	3.6084	.26	.6249
Parents	Group	1	1.0156	.42	.5360
Total	Group	1	46.0599	.08	.7843

Hypothesis Three

The third hypothesis stated that there will be no relationship between the ratings of preschool classroom environments where students received training and their scores on the knowledge test of preschool programing and practice, as total scores or subscores.

Data collected by use of the knowledge test and the environment rating scale each contained a number of subscores, 10 and 7, respectively. Areas of similar focus in the subscales of the two instruments were identified and were paired. For example, the subscale covering personal care routines in the environmental rating scale and the subscales covering safety and health in the knowledge test were paired. Then, product moment correlation coefficients were computed to determine if association existed. Results indicated no significance in association and the hypothesis was therefore not rejected. Results are presented in Table 9.

Table 9

Correlation Coefficients and Probabilities for Knowledge Test Subscores and Environment Rating Scale Subscores

Environment Rating Subscales	Knowledge Test Subscales (content specified in Table 8)										
	K1	K2	K3	K4	K5	K6	K7	K8	K9	K10	KT
Personal	.3694 .2935	.2947 .4085		.4604 .1805							
Furnishings		.1445 .6904	.1102 .7618		.4345 .2095						
Language							.3420 .3335	.3255 .3587			
Motor		.3774 .2823				.3061 .3898					
Creative						.2980 .4029					
Social									.1706 .6375		
Adult										.4641 .1767	
E Total											.4708 .1697

Discussion of the Findings

Upon review of the results of the tests of hypotheses of the study, it was concluded that none of the hypotheses could be rejected. It was found, for purposes of this study, that no statistically significant differences existed between the ratings of on-campus and off-campus preschool environments used in the training of Early Childhood Specialist students. Higher environmental rating subscores were recorded for the on-campus preschools than for the off-campus centers, but not by a significant amount. This result was probably due to having a small sample size in both groups.

This finding suggested that preschool facilities of acceptable levels of quality can be located off campus in all sections of North Carolina to use for the practical experience portion of student training. This finding seemingly contradicts the statements made by a number of educators in the North Carolina community college system during the pilot phase of the study, that high quality practicum locations were either very difficult to locate or were unavailable in their geographical area. This assumption of unavailability may be correct in certain areas of the state served by colleges not included in the study. Such uncertainty may well stimulate further investigation.

A second finding of the study was that there was no statistically significant difference between the test scores of students trained either on campus or off campus

on a knowledge test of preschool programing and practice. This may be attributed to the fact that the scores were high in general and that the measure was limited to knowledge. The addition of performance measures to future applications of this test would result in a stronger measuring instrument. On-campus students did score higher as a group in nine of the ten subscales of the knowledge test. Only in the area of knowledge of relationships with parents did students trained off campus score higher. Nevertheless, the score differences were close for the two groups which suggests that regardless of location of training, students demonstrated a high level of knowledge of preschool programing and practice.

As in the case of the first two hypotheses, the results of the test of the third hypothesis prevents its rejection, thereby confirming, that in terms of this study, there is no statistically significant relationship between the ratings of quality of the preschool classroom environments used for training, and the students' scores on the knowledge test of preschool programing and practice. It appears that wherever training was received, students' knowledge levels were comparable.

As a final remark, the number of colleges selected for the study was small. This situation, however undesirable, was due to having a limited number of colleges in the community college system that offer the Early Childhood Specialist curriculum and operate a preschool laboratory facility.

CHAPTER V

SUMMARY AND RECOMMENDATIONS

The purpose of the study was to determine the level of knowledge of preschool programing and practice in Early Childhood Specialist students who were enrolled in a community college or technical institute in North Carolina during the 1982-83 academic year. The three objectives of the study focused attention on the quality of the preschool laboratory environment where students received practical training, student knowledge of preschool programing and practice, and the relationship between student knowledge test scores and ratings of the quality of the preschool laboratory environment.

The design implemented for the study was an ex post facto approach in that exposure to the location of practical training had previously taken place. The target population was defined as all community colleges or technical institutes in the North Carolina community college system which offered the Early Childhood Specialist curriculum. Twenty-four institutions in the state system offered the curriculum at the time of this study. Of this number, fourteen offered practical training for the curriculum at a college-operated preschool and ten colleges conducted that portion of student training off-campus. Schools from the two groups were paired

by adult student department enrollment, resulting in nine pairs of colleges. Five pairs were then randomly chosen for inclusion in the study. Of this number, only one college declined to participate in the study and was replaced by the school with the closest total department enrollment. Selected colleges represented the three major geographic regions of North Carolina, the mountains, piedmont and coastal plain.

All second-year Early Childhood Specialist students at all selected colleges and technical institutes responded to a 60-item, 240-point cluster true-false knowledge test of preschool programing and practice. The test employed was adapted from the Child Development Associate Assessment Test developed by the Texas Department of Community Affairs. The adaptation of the test contained ten subscales each having from 8 to 40 items. The instrument tested knowledge of particular areas of preschool programing and practice, resulting in a subscore for each area. Statewide, a total of 99 students were tested in the study.

Student preschool training facilities were rated using the 259-point Harms and Clifford Early Childhood Environment Rating Scale (1980). All ratings were completed by a trained observer on a recording form developed by Harms and Clifford. The scale contained seven subscales having from 4 to 8 items which focused attention on various

aspects of an early childhood environment.

The data collected for this study were analyzed by using descriptive statistics and by tests of three hypotheses. The hypotheses were tested using t tests, one-way analysis of variance, and correlation coefficients. Knowledge test total and mean subscale scores were calculated for the students trained on and off campus.

The first hypothesis testing the differences in total score and subscore ratings of classroom environment between on-campus and off-campus preschool training facilities was not rejected. The rating scale total and subscale scores were higher for campus-based preschool programs than for off-campus preschool centers, but not by a statistically significant amount.

The second hypothesis testing the differences in knowledge of preschool programing and practice in second-year Early Childhood Specialist students receiving training on or off campus, as a total score and as subscores was not rejected. In comparing results of the two groups, there was variation in performance on the knowledge test with students who experienced training on campus receiving slightly higher scores, but not by a statistically significant amount. Mean total scores as a percentage of total scores ranged from 76.17% to 89.50% for the on-campus group and from 74.38% to 89.42% for the off-campus group.

The third hypothesis, which tested relationships between

the ratings of classroom environments where students received training and their scores on the knowledge test of preschool programing and practice, was not rejected. The failure to detect association may have been due to the limited number of subjects in the sample. A future effort would do well to survey all schools in the target group due to the low second year Early Childhood Specialist student enrollment at most colleges offering the curriculum in the community college system.

Overall, the results support the identification and utilization of off-campus preschool facilities as training locations for Early Childhood Specialist students from the state's community colleges and technical institutes, because their environmental quality can be as high as those preschool facilities which are college operated on campus. In addition, the results suggest questioning the veracity of statements regarding the sufficient availability of high quality off-campus practicum locations across North Carolina.

Recommendations for Future Research

The study was done to assess student knowledge as a result of their practical training experiences, either on or off campus. Toward this end, a knowledge test was used. However, the limitations of the use of a pencil-and-paper test when studying behavior which has an important performance base are recognized. It is recommended that the

Child Development Associate Assessment Test adapted for the study have continued use to support the refinement of the current form and content of the test. This could be accomplished by doing item analysis of the test questions and factor analysis of the test content. It would be desirable for the test to include a performance component for evaluation of Early Childhood Specialist students and possibly other persons preparing to work with young children or those already employed who wish to up-grade their skills.

Another area for future study relates to governmental fiscal policy and procedure in North Carolina. It is recommended that development of costly laboratory facilities on campuses across the state be attempted only after it has been determined that training locations are truly unavailable in the surrounding area.

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APPENDIX A

NORTH CAROLINA COMMUNITY COLLEGE SYSTEM

PROGRAM INFORMATION

NORTH CAROLINA COMMUNITY COLLEGES AND TECHNICAL INSTITUTES

OFFERING EARLY CHILDHOOD SPECIALIST CURRICULUM

NO ON-CAMPUS PRESCHOOL LABORATORY TRAINING CENTER

1. Caldwell Community College
   P. O. Box 600 Lenoir, N. C. 28645 704-728-4323

2. Durham Technical Institute
   P. O. Drawer 11307 Durham, N. C. 27703 919-596-9311

3. Forsyth Technical Institute
   2100 Silas Creek Parkway Winston-Salem, N. C. 27103 919-723-0371

4. Isothermal Community College
   P. O. Box 804 Spindale, N. C. 28160 704-286-3636

5. Mayland Technical College
   P. O. Box 547 Spruce Pine, N. C. 28777 704-765-7351

6. Pamlico Technical College
   Highway 306, South Grantsboro, N. C. 28529 919-249-1851

7. Roanoke-Chowan Technical College
   Route 2, Box 46-A Ahoskie, N. C. 27910 919-322-5921

8. Southwestern Technical College
   P. O. Box 95 Sylva, N. C. 28779 704-586-4091

9. Surry Community College
   P. O. Box 304 Dobson, N. C. 27017 919-386-8121

10. Wilson County Technical Institute
    P. O. Box 4305 Woodard Station Wilson, N. C. 27893 919-291-1195

PRESCHOOL LABORATORY TRAINING CENTERS
OPERATED ON CAMPUS
NORTH CAROLINA COMMUNITY COLLEGES AND TECHNICAL INSTITUTES

A. Beaufort County Community College Day Care Center
P. O. Box 1069 Washington, N. C. 27889 919-946-6194

B. Blue Ridge Technical College Child Care Center
Flat Rock, N. C. 28731 704-692-3572

C. Central Piedmont Community College Child Care Center
P. O. Box 35009 Charlotte, N. C. 28235 704-373-6633

D. Davidson County Community College Child Development Center
P. O. Box 1287 Lexington, N. C. 27292 919-475-7181

E. Gaston College Child Care Center
New Dallas Highway Dallas, N. C. 28034 704-922-3136

F. Guilford Technical Institute Children's Center
P. O. Box 309 Jamestown, N. C. 27282 919-454-1126

G. Montgomery Technical Institute Day Care Center
P. O. Drawer 487 Troy, N. C. 27371 919-572-3691

H. Piedmont Technical College Child Development Center
P. O. Box 1197 Roxboro, N. C. 27573 919-599-1181

I. Pitt Community College Preschool Laboratory
1710 West Third Street Greenville, N. C. 27834 919-752-4493

J. Rowan Technical College Early Childhood Center
P. O. Box 1595 Salisbury, N. C. 28144 704-637-0760

K. Southeastern Community College Child Development Center
P. O. Box 151 Whiteville, N. C. 28779 919-642-7141

L. Technical College of Alamance Child Care Center
P. O. Box 623 Haw River, N. C. 27258 919-578-2002

M. Vance-Granville Community College Child Development Center
P. O. Box 917 Henderson, N. C. 27536 919-492-2061

N. Wilkes Community College Child Development Center
P. O. Drawer 120 Wilkesboro, N. C. 28697 919-667-7136

THE 1982-83 EDUCATIONAL GUIDE

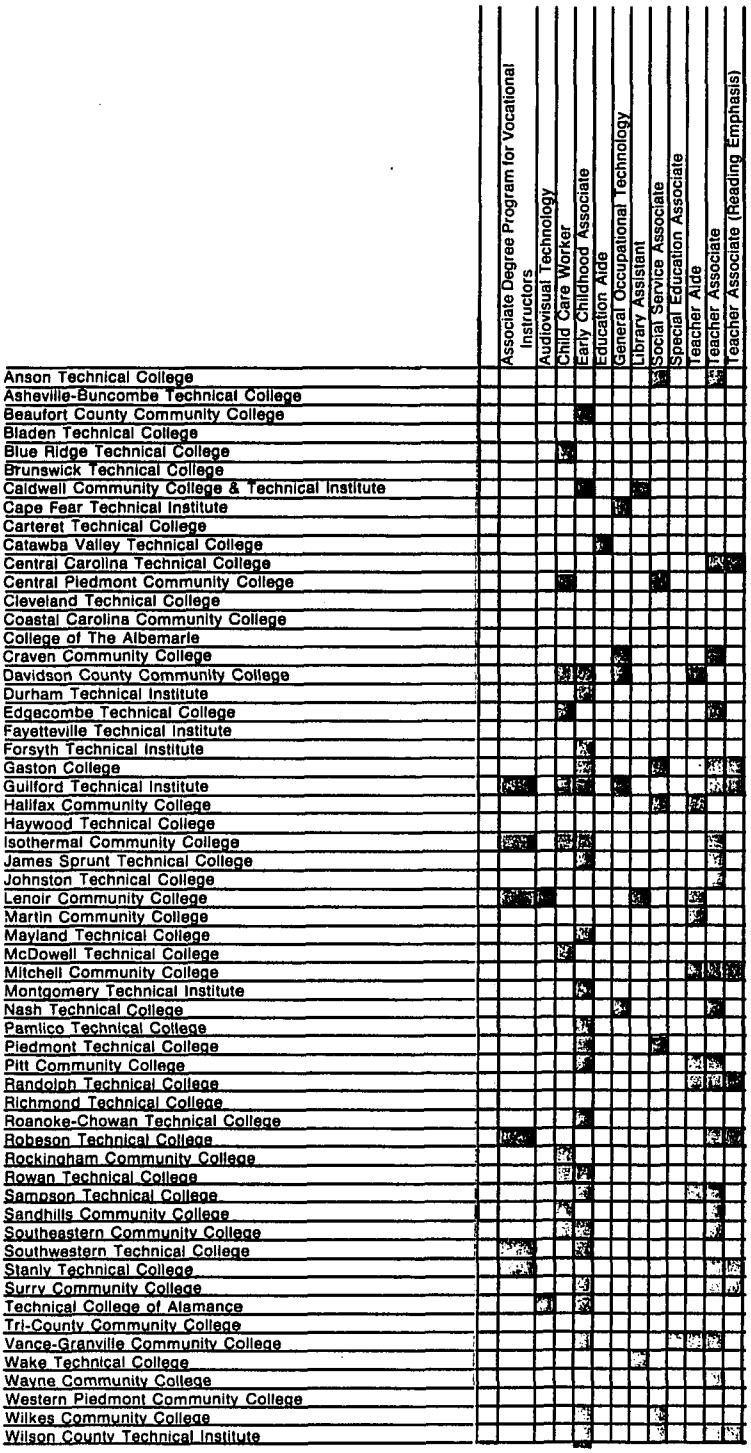
CHART

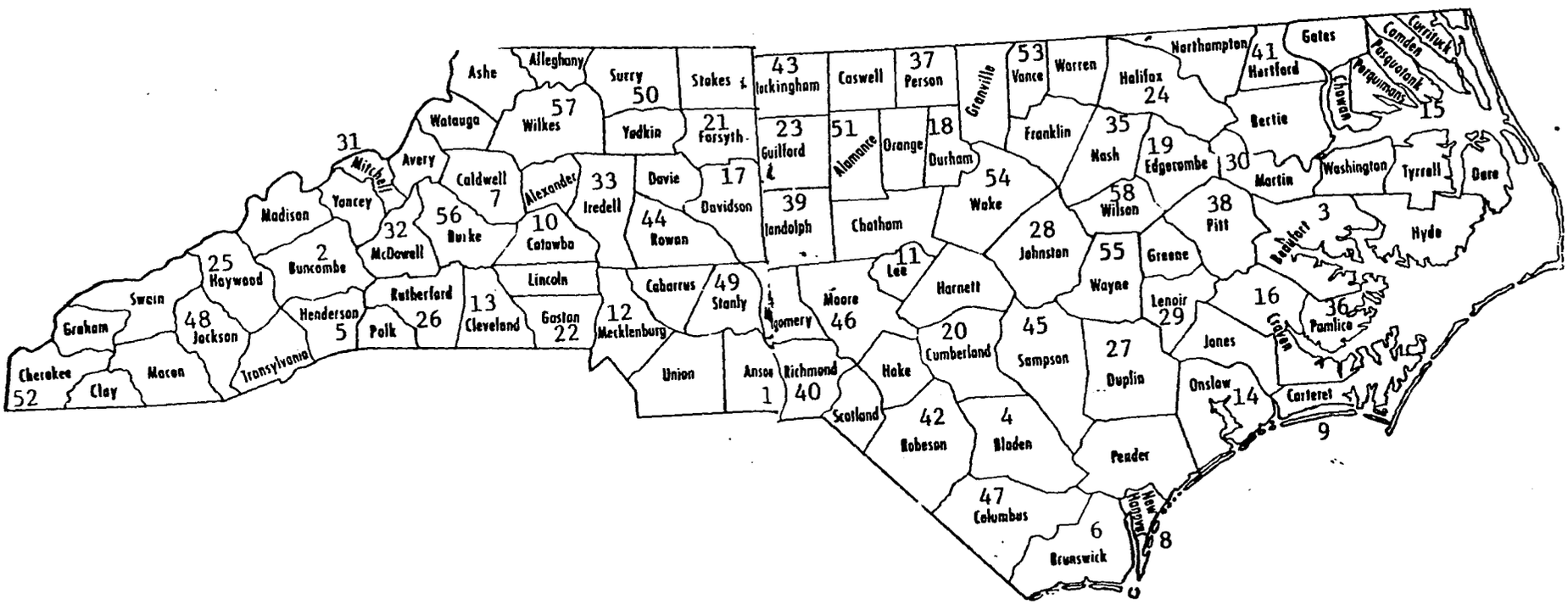
The North Carolina Community College System

North Carolina Community College System

VOCATIONAL/TECHNICAL PROGRAMS

Educational




Ashe
Alleghany
Surry
Stokes
43 Rockingham
Caswell
37 Person
Granville
53 Vance
Warren
Halifax 24
Northampton
41 Hartford
Gates
Currituck
Camden
Pasquotank
Perquimans
Chowan
15
Bertie
Watauga
Wilkes 57
Yadkin
21 Forsyth
23 Guilford
51 Alamance
Orange
18 Durham
Franklin
35 Nash
19 Edgecombe
30 Martin
Washington
Tyrrell
Dare
31 Mitchell
Avery
Caldwell 7
Alexander
33 Iredell
Davie
17 Davidson
54 Wake
58 Wilson
38 Pitt
3 Beaufort
Hyde
Madison
Yancey
56 Burke
10 Catawba
44 Rowan
39 Randolph
Chatham
28 Johnston
Greene
32 McDowell
2 Buncombe
25 Haywood
Swain
Graham
48 Jackson
Rutherford
Henderson 5
Polk
26
13 Cleveland
Lincoln
Gaston 22
12 Mecklenburg
Cabarrus
49 Stanly
Montgomery
Moore 46
Lee
11
Harnett
55 Wayne
Lenoir 29
16
Craven
36 Pamlico
Jones
Cherokee 52
Clay
Macon
Transylvania
Union
Anson 1
Richmond 40
20 Cumberland
45 Sampson
27 Duplin
Onslow 14
Carteret 9
Hoke
Scotland
42 Robeson
4 Bladen
Pender
47 Columbus
New Hanover
6 Brunswick
8

INSTITUTIONS	1978-1979	1979-1980	1980-1981	'81-'82
Anson TC				
Asheville-Buncombe TC				
Beaufort Cty. CC	47	31	33	31
Bladen TC				
Blue Ridge TC				
Brunswick TI				
Caldwell CC/TI	56	50	54	35
Cape Fear TI				
Carteret TC				
Catawba Valley TC				
Cent. Car. TC				
Cent. Pied. CC			1	
Clvd. City. TI				
Coastal Car. CC				
Col./Albemarle				
Craven CC				
Davidson Cty. CC	39	33	32	31
Durham TI	60	66	70	78
Edgecombe TI				
Fayetteville TI				
Forsyth TI	37	44	46	47
Gaston College	61	79	61	64
Guilford TI	44	57	56	65
Halifax CC				
Haywood TC				
Isothermal CC	13	17	12	6
Jas. Sprnt. Inst.	8	2		
Johnston TI				
Lenoir CC				
Martin CC				
Mayland TI	72	43	44	37
McDowell TI				
Mitchell CC				
Montgomery TI		29	25	24
Nash TI				
Pamlico TC	27	14	23	13
Piedmont TI	38	48	59	45
Pitt CC	5	7	8	9
Randolph TC				
Richmond TI				
Roa. Chwn. TI	224	175	116	63
Robeson TI				
Rockingham CC				
Rowan TI	83	167	161	122
Sampson TC		23	29	27
Sandhills CC				
Southeastern CC	81	83	76	53
Southwestern TC	96	133	76	73
Stanley TC	1	1		
Surry CC	34	31	26	20
TC of Alamance	92	125	107	89
Tri-Cty. CC				
Vance-Gran. CC	170	83	71	83
Wake TI				
Wayne CC				
W. Pied. CC				
Wilkes CC	170	164	89	107
~~Wilson Cty.~~ TI	65	50	59	54

1. In rank order of frequency of offerings of technical programs, T-073 is 10th with 24 programs. 1980-81)
2. Statewide enrollment in 1980-81 was 1,334.
3. Average enrollment per program was 55.

INSTITUTIONS	1978-1979	1979-1980	1980-1981	'81-'82
Anson TC				
Asheville-Buncombe TC				
Beaufort Cty. CC				
Bladen TC				
Blue Ridge TC	23	29	30	36
Brunswick TI				
Caldwell CC/TI				
Cape Fear TI				
Carteret TC				
Catawba Valley TC				
Cent. Car. TC				
Cent. Pied. CC	53	253	232	156
Clvd. City. TI				
Coastal Car. CC				
Col./Albemarle				
Craven CC				
Davidson Cty. CC	9	6	10	9
Durham TI				
Edgecombe TI	95	73	31	19
Fayetteville TI				
Forsyth TI				
Gaston College				
Guilford TI	58	27	4	2
Halifax CC				
Haywood TC				
Isothermal CC	12	13	32	31
Jas. Sprnt. Inst.				
Johnston TI				
Lenoir CC				
Martin CC				
Mayland TI				
McDowell TI	19	33	30	27
Mitchell CC				
Montgomery TI				
Nash TI				
Pamlico TC				
Piedmont TI				
Pitt CC				
Randolph TC				
Richmond TI				
Roa. Chwn. TI				
Robeson TI				
Rockingnam CC	30	32	34	45
Rowan TI				16
Sampson TC				
Sandhills CC	57	103	40	51
Southeastern CC	8	15	24	37
Southwestern TC				
Stanley TC				
Surry CC				
TC of Alamance				
Tri-Cty. CC				
Vance-Gran. CC				
Wake TI				
Wayne CC				
W. Pied. CC				
Wilkes CC				
~~Wilson Cty.~~ TI				

1. In rank order of frequency of offerings of vocational programs, V-067 is 16th with 11 programs.(1981-82)
2. Statewide enrollment in 1980-81 was 467.
3. Average enrollment per program was 42.

PRESCHOOL LABORATORY TRAINING CENTERS
NORTH CAROLINA COMMUNITY COLLEGES AND TECHNICAL INSTITUTES

PROGRAM OPERATION	SCHOOLS													
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
Year opened:	1980	1976	1971	1981	1977	1979	1977	1979	1981	1975	1975	1976	1976	1977
Hours open:	8-5	730-500	7-530	730-530	730-445	730-530	730-530	730-530	8-5	745-515	8-5	7-530	730-530	7-530
Days open:	M-F	M-F	M-F	M-F	M-F	M-F	M-Th	M-F	M-F	M-F	M-F	M-F	M-F	M-F
Children served:														
Total	15	25	99	43	34	54	12	24	40	32	25	50	40	19
Infants	-	-	-	-	-	6	-	-	-	-	-	5	-	-
Toddlers	-	-	-	6	10	7	-	-	-	-	-	7	-	-
Twos	-	-	18	10	-	9	3	-	-	-	-	8	9	-
Threes	5	7	22	12	12	10	3	12	10	10	10	10	9	9
Fours	5	8	28	15	12	10	3	12	15	10	15	10	11	10
Fives	5	10	31	-	-	12	3	-	15	12	-	10	11	-
Older: After school			-	-	-	15	-	-	-	-	-	30	-	-
Credentials:	AA	AA	L2	L2	AA	L2	L	L	AA	AA	L	L2	L2	L
Cost:	$30 wk	$6.25 day	$49 2s $47 3s+	$37 33 wk	$130 mo	$45 I 37.50T+	$4 day	$24 wk	$35 wk	$38 wk	$5 day	$156 mo	$150 mo	$30 wk
Source of children:														
Staff/Fac	x	x	x	x	x	x	x	x		x	x	x	x	x
Students	x		x	x		x		x	x	x	x	x	x	x
Community		x	x	x		x			x	x	x	x	x	x

L = License

AA = Double A License

L1 = Department of Human Resources Level I Credential

L2 = Department of Human Resources Level II Credential

APPENDIX B

INSTRUMENTATION

CLUSTER TRUE - FALSE TEST:

KNOWLEDGE OF PRESCHOOL PROGRAMING AND PRACTICE

Jean B. Price

Based upon material developed by

Early Childhood Development Division
Texas Department of Community Affairs
Austin

This cluster true-false test is intended to assess individual knowledge of preschool programing and practice. It is based upon material developed by the Texas Department of Community Affairs as a part of its Child Development Associate training program. Toward that end, it covers information thought important for preschool and child care staff to know for effective functioning in a preschool program. The questions cover knowledge of;

1. Making the center a safe place for children. (Items 1-6)
2. Providing for the health needs and physical development of children. (7-16
3. Organizing space and equipment for indoor and outdoor use. (17-21)
4. Helping children learn together in groups as well as alone. (22-31)
5. Using structured and unstructured materials with children. (32-37)
6. Encouraging children to explore and experiment. (38-39)
7. Advancing the language use and language comprehension of children. (40-45)
8. Building a positive self-image in children. (46-52)
9. Fostering social and emotional development in children. (53-57)
10. Building relationships with parents. (58-60)

1. Which of the following contribute to a center being safe?

   a. a fenced-in yard
   b. a small enrollment
   c. rules which are taught and observed
   d. well marked fire exits

2. Active children sometimes have accidents, so you should have:

   a. emergency phone numbers posted
   b. first aid kits available
   c. a chart of basic first aid procedures
   d. a registered nurse present at all times

3. Three children are playing in a sandbox and three other children are walking up a steeply inclined board and climbing onto the jungle gym. The child care giver should stand:

   a. halfway between the two groups
   b. nearer the children at the sandbox
   c. nearer the children climbing the board
   d. within arm's reach of the climbing board to assist if a child begins to fall

4. To maintain a safe environment, equipment should:

   a. be kept in good condition
   b. be removed if there is any risk involved
   c. allow children to learn about their own capabilities
   d. be appropriate for the various ages of the children in the center

5. Children should learn about safety from:

   a. books and stories
   b. discussions with the teacher
   c. colors
   d. having accidents

6. When judging the safety of traffic patterns, which of the following issues should you consider?

   a. traffic patterns permit some children to be coming in while others are going out
   b. scheduling of activities to relieve busy traffic routes
   c. the number of children in an activity area at any given time
   d. directional signs clearly posted for children to read

7. Typical health activities for child care centers usually include:

   a. a daily examination of the children for obvious symptoms of illness as they enter the center
   b. administering your own medication to any child who is ill
   c. administering first aid when accidents occur
   d. administering medicine only on written, dated, and signed request of parent, guardian or physician of the child

8. To provide for the health needs of the children, child care givers need to:

   a. teach good health habits
   b. learn to handle emergencies
   c. recognize symptoms of illness
   d. plan each menu to meet the nutritional needs of children

9. One purpose of serving snacks to children is to:

   a. keep them from overeating at lunch
   b. increase the amount of food they eat in a day
   c. give them energy needed to avoid fatigue
   d. fill in a time slot in a center's daily schedule

10. A child may not be feeling well if he

   a. has a pale or flushed face
   b. wants to be alone for a short period of time
   c. cries without sufficient cause
   d. is unwilling to participate in an activity that he usually enjoys

11. If during the day you observe a child who is ill you should:

   a. let the child continue to play with the other children
   b. have him rest apart from the other children until his parents come
   c. give him some medicine you have on hand
   d. comfort him and let him know he will feel better soon and then notify the parents

12. The following first aid equipment should be kept on hand:

   a. disinfectant to clean cuts and scrapes
   b. aspirin to give a child when he runs a temperature
   c. bandages
   d. a thermometer

13. An example of eye-hand coordination is:

a. riding a tricycle
b. stringing beads
c. pounding clay
d. building a tower of blocks

14. Activities such as finger plays, cutting and tearing, puzzles, and buttoning and unbuttoning help children develop their:

a. large muscles
b. small muscles
c. emotions
d. eye-hand coordination

15. Running, jumping, and walking all foster:

a. fine muscle development
b. eye-hand coordination
c. large muscle development
d. visual perception

16. Which of the following help develop fine motor skills?

a. walking a balance beam
b. putting pegs in a board
c. painting dots on the sidewalk
d. jumping

17. The arrangement of space and equipment in an early childhood center is important because it affects:

a. the way children play together
b. the quality of the learning that takes place
c. the feelings children have towards each other
d. the feelings the child care givers have toward each other

18. Learning centers are areas in the room:

a. where the teacher introduces the learning activity
b. where materials are displayed for the children to see and use
c. where the child directs the learning
d. which remain the same throughout the year

19. Which sets of centers might be conveniently located near one another:

a. block center and the record center
b. grocery store and the housekeeping center
c. water play and the art center
d. science center and gross motor center

20. Which of the following is an appropriate playground activity to develop large muscle coordination?

a. riding a tricycle
b. drawing with chalk in a defined space
c. climbing on the jungle-gym
d. playing hide-and-go-seek

21. When planning an outdoor play area for children, which of the following suggestions should be followed?

a. riding toys should be in an area apart from the open space used for games
b. an outdoor faucet should be located near the sandbox area
c. a table and benches should be provided for art activities and dramatic play
d. all active play areas should be close to the swings

22. If the child care givers and other staff respect each other the children learn to:

a. follow their examples
b. respect the rights of others
c. value their independence
d. be understanding towards others

23. Which of these materials could lead to cooperative play?

a. wooden blocks
b. a puzzle
c. a tricycle
d. paint and brushes

24. It is easier to work with a group of children if they are:

a. all the same age
b. interested in what they are doing
c. doing exactly what they want to
d. a wide variety of ages

25. If Daniel wants to be left alone during his free time and Suzie will only play with Daniel, what would you do?

a. accept the situation and ignore them
b. not accept the situation and make a change in their play groups
c. accept the situation temporarily
d. the next day suggest other possible play opportunities to Suzie

26. Which of these statements are positive reinforcements?

a. "Sally, you look very nice today."
b. "Tom, I am really pleased at how hard you are working."
c. "Becka, when you have finished you may have another puzzle."
d. "Steven is working faster than you are, Mike."

27. A quiet corner could have:

a. blocks
b. an aquarium
c. picture books
d. large pillows

28. If many activities are available, children will be more likely to:

a. find the center a nice place to be
b. become confused with too many choices
c. find ones appropriate to their level of development
d. choose the same activity repeatedly

29. On the playground young children can:

a. learn to care for toys and equipment
b. be physically active
c. interact with other children
d. choose from a variety of activities

30. Activities that might take place on the playground are:

a. physical activities
b. dramatic play
c. art activities
d. observing nature

31. Which of the following concepts can young children learn through water play?

a. two cups equals a pint
b. floating and sinking of objects
c. that certain substances dissolve in water
d. gravity

32. In teaching an activity which encourages the children to explore you might use:

a. art materials
b. science and math materials
c. picture books
d. field trips

33. Encouraging children to ask questions is important because:

a. it develops their language skills
b. it helps you plan for their needs
c. it extends their knowledge
d. it expands their familiar environment

34. Having pets in a child care center can teach the children about:

a. life cycles
b. animal food and nutrition
c. sickness and death
d. responsibility for chores

35. Which of the following is unstructured material?

a. mud
b. paint
c. paper
d. books

36. Toys and play equipment such as puzzles and nests of cubes are:

a. helpful for promoting the child's understanding of shapes and sizes
b. unstructured
c. helpful for promoting the child's understanding of time
d. structured

37. Which of the following is a structured material?

a. water play
b. lotto cards
c. sewing cards
d. play dough

38. A child care center's instructional materials should provide:

a. a generous variety of materials
b. participation in intelligence testing
c. activities appropriate for the developmental levels
d. opportunities for group and individual learning

39. During free play children should:

a. feel free to choose toys without adult direction
b. not have to follow rules
c. be able to stop playing with them when they choose
d. wait for the teacher's directions

40. Language comprehension can be developed by:

a. art activities
b. group discussions
c. writing activities
d. story records

41. The preschool child learns his language:

a. at church
b. at home
c. at school
d. in the neighborhood

42. One of the most important things a child care giver can do to encourage language development in young children is to:

a. talk baby talk to them
b. talk frequently with them
c. give them lots of books
d. provide opportunities for verbalization

43. Before reading a book to a group of young children you should:

a. read it yourself
b. consider the children's attention span
c. consider the age group
d. be sure all pictures are large and colorful

44. Good listening skills are important for:

a. language development
b. following directions
c. being aware of sounds in the environment
d. speech development

45. Which of the following are reading readiness activities for young children?

a. matching real objects with pictures of the objects
b. relating a story or experience to the teacher
c. coloring shapes
d. labeling objects

46. Children learn to think of themselves as acceptable or unacceptable as a result of:

a. playing with peers
b. the way people outside the home respond to them
c. heredity
d. the way their parents treat them

47. A way to help children cope with fear is to:

a. help them build up their feelings of confidence
b. keep them away from fearful situations
c. help them not to show fear
d. ignore the situation

48. Aggressive feelings in the preschool child:

a. are normal, but should be suppressed
b. are normal and teachers should help the child work out these feelings
c. are abnormal for a young child
d. are abnormal in any child

49. A young child develops a sense of autonomy. This phrase refers to:

a. crying for attention
b. wetting the bed
c. independence
d. self-direction

50. Which of the behaviors would help a child develop a sense of belonging?

a. giving the child a simple duty to perform
b. listening attentively when the child speaks
c. allowing a child to play without requiring that he share like everyone else
d. inviting the child to join a group activity

51. To help children become more resourceful and self-confident a child care giver should:

a. provide activities in which the children can succeed
b. encourage them to explore new activities
c. be supportive
d. direct all the children's activities

52. When a child is praised for a job well done, the child, generally:

a. makes an excuse for not having done better
b. feels a sense of satisfaction
c. will be suspicious
d. will probably do it again

53. Which of the following statements is true about setting limits for children?

a. setting limits is unnecessary in working with children
b. setting limits may cause a child to be afraid to do things
c. setting limits prevents a child from expressing his feelings
d. setting limits helps to give a child a feeling of security

54. Frustrations for a young child may result in:

a. loving behavior
b. disruptive behavior
c. no specific behavior because childhood is carefree
d. a negative attitude toward others

55. When children show physical affectionate feelings toward a child care giver, the care giver should:

a. discourage the them from becoming too dependent on her
b. return the affection
c. ignore the affection
d. never show affection to children because they might not respect her.

56. Through dramatic play and other activities, young children can have the opportunity to express:

a. fear
b. happiness
c. sadness
d. anger

57. Children may lose their separation anxiety and begin to look forward to coming to the center if:

a. there are interesting things to do
b. they realize their parents will return
c. mothers remain for a few minutes after arrival
d. the staff is welcoming

58. In trying to achieve coordination of the home and the center, the child care giver needs to consider:

a. parent's needs
b. the parent's child-rearing practices
c. the children's needs
d. the center's needs

59. Parents are more likely to feel connected to a center when they:

a. participate in a program
b. donate materials
c. contribute their labor in fixing up the center
d. are greeted by a child care giver

60. Activities parents do with their children at home:

a. can be part of parent's daily activities
b. should be work, not enjoyment
c. should occur in a structured time period each day
d. can be done with household materials

NSWER SHEET

luster True - False Test of Knowledge of Preschool Programing and Practice 91

irections: Using pencil, for each test question below, circle either T or F beside a., b., c., and d. telling whether the choices are either true or false for that question.

.a. T F	11.a. T F	21.a. T F	31.a. T F	41.a. T F	51.a. T F
b. T F	b. T F	b. T F	b. T F	b. T F	b. T F
c. T F	c. T F	c. T F	c. T F	c. T F	c. T F
d. T F	d. T F	d. T F	d. T F	d. T F	d. T F
.a. T F	12.a. T F	22.a. T F	32.a. T F	42.a. T F	52.a. T F
b. T F	b. T F	b. T F	b. T F	b. T F	b. T F
c. T F	c. T F	c. T F	c. T F	c. T F	c. T F
d. T F	d. T F	d. T F	d. T F	d. T F	d. T F
.a. T F	13.a. T F	23.a. T F	33.a. T F	43.a. T F	53.a. T F
b. T F	b. T F	b. T F	b. T F	b. T F	b. T F
c. T F	c. T F	c. T F	c. T F	c. T F	c. T F
d. T F	d. T F	d. T F	d. T F	d. T F	d. T F
.a. T F	14.a. T F	24.a. T F	34.a. T F	44.a. T F	54.a. T F
b. T F	b. T F	b. T F	b. T F	b. T F	b. T F
c. T F	c. T F	c. T F	c. T F	c. T F	c. T F
d. T F	d. T F	d. T F	d. T F	d. T F	d. T F
.a. T F	15.a. T F	25.a. T F	35.a. T F	45.a. T F	55.a. T F
b. T F	b. T F	b. T F	b. T F	b. T F	b. T F
c. T F	c. T F	c. T F	c. T F	c. T F	c. T F
d. T F	d. T F	d. T F	d. T F	d. T F	d. T F
.a. T F	16.a. T F	26.a. T F	36.a. T F	46.a. T F	56.a. T F
b. T F	b. T F	b. T F	b. T F	b. T F	b. T F
c. T F	c. T F	c. T F	c. T F	c. T F	c. T F
d. T F	d. T F	d. T F	d. T F	d. T F	d. T F
.a. T F	17.a. T F	27.a. T F	37.a. T F	47.a. T F	57.a. T F
b. T F	b. T F	b. T F	b. T F	b. T F	b. T F
c. T F	c. T F	c. T F	c. T F	c. T F	c. T F
d. T F	d. T F	d. T F	d. T F	d. T F	d. T F
.a. T F	18.a. T F	28.a. T F	38.a. T F	48.a. T F	58.a. T F
b. T F	b. T F	b. T F	b. T F	b. T F	b. T F
c. T F	c. T F	c. T F	c. T F	c. T F	c. T F
d. T F	d. T F	d. T F	d. T F	d. T F	d. T F
.a. T F	19.a. T F	29.a. T F	39.a. T F	49.a. T F	59.a. T F
b. T F	b. T F	b. T F	b. T F	b. T F	b. T F
c. T F	c. T F	c. T F	c. T F	c. T F	c. T F
d. T F	d. T F	d. T F	d. T F	d. T F	d. T F
.a. T F	20.a. T F	30.a. T F	40.a. T F	50.a. T F	60.a. T F
b. T F	b. T F	b. T F	b. T F	b. T F	b. T F
c. T F	c. T F	c. T F	c. T F	c. T F	c. T F
d. T F	d. T F	d. T F	d. T F	d. T F	d. T F

DATA RECORDING FORM

KNOWLEDGE OF PRESCHOOL PROGRAMING AND PRACTICE IN NORTH CAROLINA COMMUNITY COLLEGE SYSTEM EARLY CHILDHOOD SPECIALIST STUDENTS

STUDENT NUMBER	SCHOOL NUMBER	CENTER NUMBER	ON-CAMPUS SCORE	OFF-CAMPUS SCORE	TEST SCORES										TOTAL
					Subscores:	24	40	20	40	24	8	24	28	20	12	240
					Items :	1-6	7-16	17-21	22-31	32-37	38-39	40-45	46-52	53-57	58-60	

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