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# KINDERGARTEN ADMISSION PROCEDURES IN INDEPENDENT SCHOOLS WITH SUGGESTED GUIDELINES

by

Barbara B. Judy

A dissertation submitted in partial fulfillment of the requirements for the degree of

Doctor of Education

University of San Diego

1984

Dissertation Committee

Patricia A. Lowry, Ph.D. Director Timothy M. Burns, Ph.D. Eugene Labovitz, Ph.D. Susan M. Zgliczynski, Ph.D. KINDERGARTEN ADMISSION PROCEDURES IN INDEPENDENT SCHOOLS WITH SUGGESTED GUIDELINES

Judy, Barbara B. Ed.D. University of San Diego, 1984. 296 pp. Dissertation Director: Dr. Patricia A. Lowry.

The purposes of this research were to (a) define the procedures used in evaluating children for admission to independent school kindergartens, (b) to investigate selected variables and ascertain their significance in the admissions process and, (c) to formulate guidelines for assessing applicants to independent school kindergartens. Subjects were 119 randomly selected independent school admissions officers and 11 professors in universities in the United States.

Data were gathered from the subjects through a 25 item survey instrument designed by the researcher. The chisquare statistical analysis procedure was used to measure the significance of differences between groups on the research questions. The Friedman test was utilized to test the independence of ranked criteria. The .05 level of significance was used to determine whether the observed differences were significant.

Variables investigated included the training and experience of directors, admissions officers, teachers and others; the amount of time spent in interviewing, observing and testing applicants; and the school's selection ratio, reenrollment rate and level of satisfaction with procedures. Subjects ranked qualities perceived as important in evaluating applicants to independent school kindergartens.

The data analysis revealed:

- 1. Admissions officers with less than six years experience spent the least amount of time observing applicants and were located in schools with the lowest selection ratios.
- 2. Teachers and all persons who interviewed applicants less than 30 minutes were satisfied with their procedures or satisfied but felt they could improve procedures. Increased time spent in interviews did not increase satisfaction with procedures.
- 3. The rank ordering of qualities sought in applicants indicated significant differences between the New England area and the Far West. The qualities perceived as most important in the Néw England region were related to behavior of applicants; the qualities most highly ranked in the Far West were cognitive. The Far West agreed most closely with the rankings of university professors. This finding has implications for independent school inservice training and admissions procedures.

It was the conclusion of the researcher that admissions procedures in independent schools studies were similar in

nature, but with regional differences in emphasis.

Guidelines for admissions based on the research were
developed and presented.

#### DEDICATION

This Dissertation is dedicated to:

Richard W. Judy

and

My Parents and Children

#### ACKNOWLEDGEMENTS

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#### CHAPTER I

#### INTRODUCTION

The Fourteenth Annual Gallup Poll of 1982 which surveyed the public's attitudes toward the public schools, indicated 45% of parents surveyed would prefer to send their children to private school, if money were no object. The reasons most frequently cited included (a) perceptions of higher standards in private schools, (b) better discipline, and (c) more individual attention (Gallup, 1982, p. 47). Slade (1981) reports the elite wealthy parents or families who supported independent schools in the last decade now include many middle class parents who have elected to enroll their children in independent schools because they are concerned about the quality and stability of education in the public schools. The Council for American Private Education (CAPE, 1983) reports more than 60% of all private school parents earn less than \$25,000 per year, yet are willing to assume the extra expense of enrolling their children in schools which charge tuition. Reasons cited in the New York Times (Maeroff, 1981) include a desire for more discipline and academic rigor, a perceived need for more attention to individual students, an insecurity due to teacher strikes and school closings, and a desire for an

environment "where traditional values can be taught" (ED. 27). Parents have generally desired the best in education for their children, and the two career, two income family has "intensified the success oriented environment, the aura of ambition surrounding the young child" (Hulbert, 1981, p. EDI). Career orientation of young mothers has created a need for more adult supervision for longer hours, while an appreciation for educating young children has become more prevalent. As long as parents perceive the private schools as excelling in education, the independent school will remain the focus of attention for many families.

In 1981 the National Center for Education Statistics published its most recent survey results in Private Schools in American Education. At that time, the results indicated "eighteen percent of all elementary and secondary schools...were under private control and enroll more than ten percent of the total number of pupils. [In addition, these schools] employ eleven percent of the total number of teachers...[and] generate and spend about six percent of the total amount expended for elementary and secondary education" (p. vi). The Center's revised 1980-81 statistics were available as unpublished data in April, 1983. When published, Table 44 of the revised study will report a total of 4,961,755 students enrolled in 20,764 schools being taught by 277,413 teachers. In elementary and combined elementary and secondary schools, 3,832,764 students attend 16,792 schools and are taught by 197,811 teachers.

statistics further reveal that 1,563,764 students being taught by 101,072 teachers are enrolled in 8,749 nonCatholic schools. These schools educate 200,851 preprimary or prefirst grade children (NCES, 1983).

There is no single coherent set of goals common to all independent schools, however, each independent school makes its decisions about goals and methodology consistent with its charter. All schools differ in structure, but their boards or trustees are empowered by charter to make decisions for and in the name of the school. Authority is delegated to a head who acts in concert with the board and represents it to the school and community. The head in turn represents the school to the board. Authority and power are generously delegated to the head by the board, and the head has the authority to delegate authority to others according to perceived needs of the school. The head is accountable only to the board. The head is usually hired for his/her personal and leadership characteristics and his/her background in education, usually in the private sector. Among the responsibilities of the head are curriculum, admissions, discipline, hiring and supervising faculty, and fund raising although these responsibilities may be shared with board members and other school personnel. Many heads teach classes on a regular basis, possibly because of the smaller size of most independent schools, and because the head may prefer "to spend most of his time with students" (Kraushaar, 1972, p. 189).

The private school enjoys a condition of mutual choice--parents choose the school and the school chooses the students. This mutual voluntariness in the "relationship between family and school produces higher parental satisfaction in each school" (Kraushaar, 1972, p. 106). This voluntary choice of school and of student leads to mutual trust and responsibility between student, school and family. Each has made a selection and each is free to terminate the relationship at any time. This tends to remove any adversarial attitudes and contributes to a positive working relationship. Another characteristic of independent schools is that admissions can be based on characteristics such as aptitudes, religion, ethnic background, family or ability to pay tuition. Whatever the requirements or choices, independent schools do select students they perceive as complimenting the school. independent school may be characterized by its independence; its relative automony; its selection processes for students, employees and methods; and by a smaller size usually determining the optimal, more manageable number of students.

In order to meet the educational goals of its board or trustees each individual independent school has developed some procedure or process for selecting the students who are perceived to be the best qualified to participate in and to contribute to that school's program. Explicitly defined goals and school population, knowledgeable use of existing psychological precepts and instruments and a high degree of

involvement of the personnel who are responsible for admissions are three items essential to identify those youngsters best able to benefit from specific independent primary program.

Hulbert (1981) reported an increase of 20% in kindergarten applications in New York City, with some schools receiving so many applications for the following year that early cut off dates had to be imposed. Pierce (1980) stated that two-thirds of the applications to San Francisco private kindergartens failed to achieve their first choice, and one Boston school reported 80 applications for the following year. In a suburban San Diego community an adhoc committee on school utilization revealed 850 kindergarten through grade six students in independent schools, while the public schools enrolled 890 students in the same area in the same grades. Of the 19 private schools further interviewed, 15 had a total of 493 children on waiting lists (Mueller, 1982).

"Parents go through the crunch, financial and emotional, in the hopes of ensuring their children will be able to make it at good...elementary schools." This "race for Harvard" starts at nursery school according to both <u>Time</u> magazine (Pierce, 1980, p. 78) and <u>The New York Times</u> (Hulbert, 1981, p. 19). Screening large numbers of children for available openings in independent schools is a frustrating process. Parents are tense and anxious about the process and the final decision, admissions officers try

to evaluate performance and personal characteristics with sensitivity and an awareness of time contraints, and the applicant has pressure to perform on a certain level at a specified time (Hulbert, 1981; Pierce, 1980; Slade, 1981; & Vils, 1982).

Designing an admissions process, and implementing the procedures with the previously cited contraints and concerns can be a frustrating experience for admissions personnel. The unitary and autonomous organization of each independent school precludes specific guidelines and procedures followed by all schools and thus leaves the individual few resources for evaluating and objectifying the admissions process.

Educational leaders in independent schools can assume a significant role in shaping change in the independent schools setting and in the community in which the school operates by collective purposeful behavior which unites both leaders and followers in pursuing positive ethical changes (Burns, 1978). Such leadership is common because it is found in the daily efforts of people mutually pursuing collective and valued goals. It is uncommon in that it contributes "to change, measured by purpose drawn from collective motives and values" (Burns, 1978, p. 427). Leadership opportunities in education spring from individuals engaged in collective efforts which are purposive. Such opportunities are available to all educators, at every level. The purpose of this research is

to investigate the kindergarten admissions process and personnel in independent schools, and to provide guidelines for improving or changing the process if schools desire.

#### Statement of the Problem

Those persons responsible for designing and/or implementing screening procedures for young children entering kindergarten face several important problems. First, there is a determination to be made as to the most useful types of information required for evaluating This information base must be dictated by the candidates. philosophy and educational goals of each independent school in its kindergarten program. Secondly, the methods by which such information is obtained is of concern given the young child's brief attention span and possibly atypical behavior in a new situation and environment. Ever present is the possibility that a child may be incorrectly evaluated and misclassified in the assessment process (Gallerini, 1982). Consideration must also be given to the availability of personnel to implement the admissions process and their background and training, the length of time practicable for assessment, and the cost of the assessment process. these and other potential shortcomings in kindergarten admissions procedures, every independent school with an excess of student applicants for available openings has developed some method by which applicants are assessed and evaluated for admission.

Research has been conducted and reported which has as its focus the assessment or evaluation of talents and/or skills levels of gifted youngsters (Ehrlich, 1978; Green & Cansler, 1978; Karnes, 1978; Leonard, 1977; Ryan, 1978). However, this issue has not been investigated nor reported from the perspective of the independent schools which wish to identify specific qualities in applicants which their programs might nurture.

### Purpose of the Study

Each independent school is an autonomous organization responsible and responsive to its board of governance which defines the philosophy and goals of that particular school within a context of applicable federal, state and local laws and regulations. As an independent educational organization there is latitude in developing standards, goals, methodology and procedures for all facets of the educational processes and academic life within the purview of each school as defined by its stated philosophy. The National Association of Independent Schools (NAIS) represents 999 independent schools who qualify for membership on the basis of membership in and/or approval by an appropriate evaluating agency (usually the regional accrediting association of schools and colleges). NAIS members must not be in violation of state or federal laws or regulations regarding discrimination toward students and personnel, and must be incorporated as nonprofit, tax exempt institutions

according to Internal Revenue statutes. This collegial organization makes no attempt to standardize schools nor to impose restrictions on independent schools other than those described above but does attempt to provide services to members such as workshops (NAIS, 1983). The purpose of this research is to investigate kindergarten admissions procedures in NAIS member schools, the personnel and procedures involved, and to formulate guidelines to strengthen and improve this process.

The recent development of parental interest in independent elementary education has resulted in increased numbers of applications for admission to private schools. To process these applications and to select appropriate candidates who may benefit from a program has caused admissions personnel to evaluate and to develop more sophisticated and objective techniques of applicant evaluation than those which may have been adequate in previous years when enrollments were not at capacity.

Development of improved procedures for student selection should involve an evaluation of the level of success of the current procedures. School personnel can determine a successful process from their perspective as the implementers of the process, however, indirect measures may have to be investigated in order to evaluate the reality of the outcome of this process. One such measure is parental satisfaction with the hidden assumption that dissatisfied parents withdraw their support, their children, from

independent schools. Two criteria identified by the Childhood Development Research Group at the University of Washington in Seattle to evaluate the success of their highly gifted preschool program are "the numbers of children who reenroll, and the numbers of program applicants" (Roedell, Jackson and Robinson, 1980, p. 77). Another measure indicating the fit of the child and the school is the number of children who successfully complete any academic level and are therefore offered contracts to continue attending the school. These criteria will be used in forming hypotheses for this study.

The absence of reported research addressing the issues of assessment and evaluation of the abilities of young children in independent education and the absence of reported guidelines for kindergarten admissions procedures in the independent sector places an enormous burden on individuals whose designated responsibility is admitting or denying admission to applicants. Persons responsible for admissions recognize this lack of substantive direction as indicated by their support of and attendance at those workshops offered to them by NAIS. According to the NAIS Director of Admission Services, sessions at their annual conferences of independent schools and their admissions workshops devoted to kindergarten admissions "have been very popular and in fact, over subscribed" (Talbott, personal communication, September 1, 1982).

In summary, the purposes of this research are as follows:

- To identify procedures currently in use for the evaluation of kindergarten applicants
- To define the training and/or experience of persons involved in the admission process
- 3. To compare current selection processes in independent schools with procedures recommended by early childhood development and education specialists in accredited schools of education within United States universites
- 4. To analyze any differences between the reenrollment rate and level of satisfaction with procedures at independent schools in order to determine the success of those procedures, and
- 5. To develop recommended guidelines for the assessment of abilities of kindergarten applicants to independent schools based on field practices and psychological theories.

#### Statement of Need

The problems of evaluating young children's abilities and behaviors in the kindergarten admissions process presented themselves in the researcher's admissions experience in an independent school, and in queries from other independent schools at workshops and conferences concerning admissions procedures.

There is a need for research on the independent schools as indicated by the lack of reported empirical data. Independent school administrations have expressed an interest in kindergarten admissions: J. Bail, personal communication, April 27, 1983; C. Ballard, personal communication, April 15, 1983; A. Coppinger, personal communication, September 27, 1983; R. Peters, personal communication, March 18, 1983; J. M. Stockdale, personal communication, April 7,1 1983; J. D. Wilkins, personal communication, May 18, 1983. Results of this research have been requested by The School of Education, Northwestern University (D. Slaughter, personal communication, May 9, 1983), the Institute of Child Behavior and Development, University of Illinois (B. L. Deal, personal communication, November 7, 1983) and by the Council for American Private Education (R. L. Smith, personal communication, October 27, 1983). Correspondence with NAIS directors indicated there was a need for such a study because "professionals in this field are clamoring for models and guidelines to assist them in this area of admissions" and "such research would be a great asset to our schools" (H. Talbott, personal communication, September 1, 1983). The NAIS Director of Academic Services additionally indicated his interest in this area of research as "both interesting and timely" (L. Knight, personal communication, July 12, 1983).

With increasing numbers of applications for available openings at the kindergarten level, it has become necessary

for admissions persons to develop anew and/or refine existing procedures to identify children who could benefit from that schools' particular educational program. At the same time, school personnel are cognizant of the ramifications of having to deny admission to applicants. The societal tendency toward litigation as a means of redressing grievances is well documented. The independent schools have no regulatory body responsible for setting admissions standards and overseeing compliance with regulations. Admissions personnel are, then, placed in a position of being potentially vulnerable to charges of denying admission to applicants solely on the basis of subjective determinations. This study should be useful to independent school administrators, educators and admissions personnel in the United States in the development of improved practices for student selection which should prove to be of benefit to the institutions as a whole and their specific clientele as individuals.

#### Statement of Hypotheses

The following objectives have been defined and hypotheses formulated based on the purposes of this study and a selected review of pertinent literature.

The first objective of this study is to identify procedures currently in use in independent school kindergarten admissions. The following hypotheses have been formulated and will be tested at the .05 level of significance by the chi-square procedure.

- 1.1. Independent schools with specific procedures for evaluating applicants will have no higher student reenrollment than schools with no specific procedures.
- 1.2. Independent schools with specific procedures for evaluating applicants will be no more satisfied with the admissions process than schools with no specific procedures.
- 1.3. Schools with a large selection pool of applicants will have no more specific procedures for evaluation than schools with a small selection pool.
- 2. The second objective is concerned with the background training or experience of the person or persons conducting the evaluation of candidates. A chi-square analysis of this data will be tested at the .05 level of significance.
  - 2.1. Independent schools with trained admissions personnel will have no higher student reenrollment than schools with untrained personnel.
  - 2.2. Independent schools with experienced admissions personnel will have no higher student reenrollment than schools with inexperienced personnel.

- 2.3. Independent schools with trained admissions personnel will indicate no greater satisfaction with procedures than schools with untrained personnel.
- 2.4. Independent schools with experienced admissions personnel will indicate no greater satisfaction with procedures than schools with inexperienced personnel.
- 2.5. Independent schools with a higher selection ratio will not have personnel with more training than schools with a lower selection ratio.
- 2.6. Independent schools with a higher selection ratio will not have personnel with more training than schools with a lower selection ratio.
- 3. The third objective of this research is to compare school evaluation criteria of applicants with criteria recommended by child development and education specialists in United States universities. Both groups will complete a questionnaire and a Friedman Test will be applied to ranked criteria. It is hypothesized that:
  - 3.1. There will be no significant differences between admissions persons' rankings of importance qualities for applicants to independent schools and those qualities

- perceived as important by child development and education specialists in United States universities.
- 4. The fourth objective is to analyze any differences between the reenrollment rate and a school's level of satisfaction with its admissions procedures.

  A chi-square analysis will be made of the responses at the .05 level of significance. It is hypothesized that:
  - 4.1. There will be no significant difference between the reenrollment rate of students and the school's level of satisfaction with its admissions procedures.
- 5. A fifth objective of this research is to measure the significance of differences between responses on other selected variables measured in this research. A chi-square statistical procedure will be used to analyze these data at the .05 level of significance.
- 6. A sixth objective of this research is to formulate guidelines for kindergarten admissions procedures in independent schools. These guidelines will be developed by analyzing data obtained from independent schools and child development and/or education specialists in schools of education within United States universities. As a result of this study, guidelines will be suggested in

terms of appropriate procedures for assessing and evaluating the abilities of kindergarten applicants to independent schools. These guidelines will be made available to schools through the National Association of Independent Schools.

#### Definition of Terms

All professions seem to have developed terms of reference and identification which have meaning to those in that profession. Terms used in independent education, while well known to the users, are generally not know outside of the independent school setting. For clarification, such terms and others used in this research are defined as follows:

- Admissions officer(s), persons, personnel. The school designated individual(s) with the responsibility for conducting and/or coordinating all facets of the admission process (NAIS, 1983).
- Admission(s) procedures. Specific actions taken by a school from initial inquiry and parent interview (Hoppin, personal communication, November 10, 1983). May include interviews, and/or observations, formal/informal testing of applicants, among other measures. Used interchangeably with #3 (Hulbert, 1981; Pierce, 1980).

- 3. Admission(s) process. Customary method of conducting the business of admissions from receipt of application to acceptance or denial of that application. Used interchangeably with #2.
- 4. CAPE. Council for American Private Education.
- 5. Experienced personnel. Persons with more than two years in an admissions position.
- 6. Gifted. Individuals who are functioning at or who show promise of functioning at high levels of intellectual ability (Clark, 1982).
- 7. Independent school. A nonpublic school with selected students which may or may not charge tuition and/or fees. (Also referred to as private school.) Governance is by an autonomous board or trustees, who may delegate power and authority to a head (Kraushaar, 1972).
  - 8. <u>Kindergarten</u>. A one year course of study immediately preceding first grade (Headley, 1965, p. 13).
  - 9. <u>NAIS</u>. The National Association of Independent Schools.
  - 10. NCES. National Center for Education Statistics,U. S. Department of Education.
  - 11. <u>Porter Sargent</u>. Indicates reference to <u>The Handbook of Private Schools: An Annual A Descriptive Survey of Independent Education.</u>
  - 12. Reenrollment. Those present students offered

- contracts for the following year. (This includes those who will not return because of moving, finances, etc., but are eligible as indicated by being offered a contract for the following year.)
- 13. School test. Non-normed informal tests designed for and in use in an individual school. May include such items as checklists, criterion referenced tests, tasks mastered, and functional assessments (Anastasi, 1982).
- 14. <u>Selection pool</u>. The numbers of persons who have formally applied to a school (Anastasi, 1982, p. 182).
- 15. <u>Selection ratio</u>. The number of persons selected for admission from the number of formal applicants (Anastasi, 1982, p. 181). For this research, the ratios are arbitrarily determined to be small ratio 2:3, medium ratio 1:2, large ratio 1:3.
- 16. Standardized test. A published test with standard prescribed directions and for which normative data are available from a specified population (Anastasi, 1982).
- 17. Training. Related instruction or preparation for the tasks involved in admissions. This may include a minimum of ten hours of course work in child development, early childhood education, tests and measurement, psychology or similar time spent in on the job training, attendance at

workshops related to admissions, and/or child development and other related tasks (Gear, 1978).

# Design of the Study

Survey research procedures are used to "determine opinions, attitudes, preferences and perceptions of groups of interest to the researcher" (Borg and Gall, 1979, p. 27). While demographic information about selected independent schools is available, specific information about school policies and methodologies is available only from those individual schools under consideration. A comprehensive review of the related literature revealed a lack of reported research regarding the assessment and evaluation of kindergarteners' abilities related to the admissions process in independent schools; therefore, a descriptive survey research procedure was utilized to gather information from individual independent schools which offered kindergarten programs.

Two sources were used to determine this population. The National Association of Independent Schools maintains lists of all member schools and indicates the grade levels offered by each school. The second source used describing independent schools is <a href="#">The Handbook of Private Schools:</a>
An Annual Descriptive Survey of Independent Education, 63rd ed. (Porter Sargent, 1982). Those independent schools with kindergarten programs listed in both of the previously named sources constituted the target population for this study.

A cross-sectional survey method (Kerlinger, 1965) was employed to gather data from a randomly selected sample of independent schools. The period selected for data collection was April and May, 1983, since the school population would be stable and admissions officers' duties would be less great at this time of year, allowing them time to participate in this research.

A research questionnaire formulated from a review of the literature and research objectives of this study was constructed to elicit a maximum of information which the respondent could record in fifteen to thirty minutes.

The methodology employed is further explained in Chapter III.

# Assumptions of the Study

- When the established procedures are observed, standardized tests may provide information about young children's achievements and abilities (Clark, 1980).
- Non-normative functional assessments or criterion referenced tests may provide information about the level of functioning of young children (Anastasi, 1976).
- 3. Each independent school has developed a type of selection process for the purpose of evaluating applicants for admission (Hulbert, 1981).
- 4. All schools in this research population have an

excess of applicants and that the schools will select students demonstrating their highest levels of achievement.

## Limitations of the Study

This study is limited to an analysis of data obtained from a written questionnaire sent to a systematic random sampling of 165 admissions officers in United States mainland independent schools with kindergarten programs who were members in good standing of NAIS and were also cited as "Leading Private Schools" by Porter Sargent in the 63rd edition of <a href="The Handbook of Private Schools">The Handbook of Private Schools</a> (1982). Responses are generalizable only to those schools responding to the survey and to the extent that those responses are accurate and reflect the procedures used to select the 1982-83 school year enrollment.

### Organization of the Dissertation

The research in this study is organized as follows:

Chapter I states the rationale for the study of

kindergarten admissions in independent schools, with a brief

description of the survey research methodology employed.

Assumptions, limitations and terms of this study are

defined.

Chapter II discusses selected related literature regarding independent schools, kindergarten programs in

United States schools, and those additional studies reported which lend greater interpretation to this research study.

Chapter III contains the detailed methodology of the research design and presents the data obtained in this study.

Chapter IV discusses the analysis of the data obtained and relates the results to the stated objectives and hypotheses of the study.

Chapter V summarizes the study contained herein with conclusions, presents the guidelines and makes recommendations for further studies.

#### CHAPTER II

#### REVIEW OF THE LITERATURE

This chapter has as its focus a review of literature relative to the research topic Kindergarten Admissions Procedures in Independent Schools. A framework for this topic is provided by a brief overview of the independent schools and a recapitulation of the development of kindergarten education in the United States. The methods and means by which the abilities of kindergarten age children are identified is explored. In the absence of studies reporting on the specific topic of kindergarten admissions policies in independent schools, the information base was expanded to include methods of identification of gifted young children. Highly competitive private schools tend to attract the families of above average ability students, so literature concerning the identification of gifted young children has been included as an appropriate area of review (See Assumptions, p. 21). Grade level placement according to a particular age attainment is neither mandated nor universally accepted in independent schools, so this literature was further expanded to include preschool age children in order to acquire information on assessment and evaluation of the abilities of four year olds. The approximate age range for kindergarten children

in this research is between four and six years of age.

A comprehensive literature search encompassed many sources. Strategies included the use of the Lockheed DIALOG system at the University of San Diego Copley Library in order to access information in the ERIC clearinghouse on Elementary and Early Childhood Education at the University of Illinois, at Urbana-Champaign. In addition, this same system allowed access to the Exceptional Child Education Resources at the Council for Exceptional Children in Reston, Virginia. This resource center maintains data on gifted and handicapped children. Descriptors used were preschool education, preschool children, kindergarten education, kindergarten children, young children, early childhood education, academically gifted, identification, admissions and private schools. Professional journals, abstracts, periodicals, books and microfilms were researched in library collections at University of California, Los Angeles; University of California, Berkeley; University of Washington, Seattle; University of Arizona, Tucson; University of San Diego and San Diego State University. Conversations and correspondence with university professors who had received the survey questionnaire directed this researcher to others in the field of education and psychology who might have unpublished information or research pertinent to this study (I.Y. Liberman, personal correspondence, May 10, 1983; D. Slaughter, personal correspondence, May 9, 1983).

It was evident in the early and later stages of this review of the literature that research on the identification of the abilities of young children, aged four to six, was limited. Studies have been reported regarding assessment of the abilities of young children when those children are both gifted and handicapped or both gifted and members of minority ethnic groups, or both gifted and with limited economical resources (Bruch, 1971; Dunn, 1973; Elkind, 1973; Greene & Cansler, 1978; Karnes & Bertschi, 1978; Leonard, 1977, 1978; Renzulli, 1973; Sattler, 1974). When a study provides an appropriate and applicable insight into the abilities of young gifted children, regardless of other variables, that study has been included in this review of the literature.

# Genesis of the American Independent School

The early English Colonists in America established schools which followed the educational pattern of England in the seventeenth and eighteenth centuries. The leaders of the Massachusetts Bay Colony were themselves educated men and recognized the importance of education in the development of the Colony. As products of the Protestant Reformation, reading the <u>Bible</u> was a Christian's sacred duty and knowing how to read was of prime importance in fulfilling this duty. Education, by extension of this rationale, was also considered an obligation in terms of

comprehending the Scriptures as a means of fulfilling life in the present and eternally.

Apprenticeships were the most common means of acquiring an education in the Colonies. The laws and statutes of the early 1600's provided for the apprenticing of poor and orphaned children in order to educate them. Children were also voluntarily apprenticed in order to learn a trade (Good & Teller, 1969). The first general education law in Massachusetts was passed in 1642. This was, in part, an apprenticing law and provided sanctions against both parents and masters who neglected to teach children "to read and understand the principles of religion and capital laws of this country" (Morison, 1956). In 1647, a Massachusetts law was enacted which required each town of 50 householders to provide a teacher "for all such children as shall resort to him to write and read, and whose wages shall be paid either by the parents or masters of such children, or by the inhabitants in general." The law also required towns of 100 householders to establish a grammar school "to instruct youth so farr as they shall be fitted for the University." The common name for this particular law is the "Old Deluder Satan Act" as it opens with a reference to "that old deluder Satan" whose purpose was to keep man from a knowledge of the Scriptures.

The dame school, which was popular in England, transferred easily to New England villages and towns. The central town square, or commons, with the community

developed on the perimeter of the commons, facilitated children's attendance in a home organized as a dame school by one of the local women. These schools exposed children to the alphabet, numbers and perhaps simple reading. The dame schools were preparatory to the town and grammar school which required a knowledge of these basics for entrance. Many girls received their only formal education at the local dame school, and if the community or settlement had established no other schools, the dame school might also provide the only education for the boys. (Frost, 1966).

Boys over the age of five were welcome in the early schools and girls would be enrolled if their parents desired, but enrollment of girls would have been unusual. Many of these early schools were conducted by women, but some were termed reading or writing schools as opposed to the dame schools which were conducted in the home. reading schools, conducted by women, the beginners learned alphabet, simple spelling, reading and beginning sewing and knitting" (Seybolt, 1935, p. 9). Writing schools concentrated on writing and usually provided the writing materials. Occasionally, the curriculum included reading and/or arithmatic. The writing school curriculum might include further instruction in reading, spelling could be taught, and religious classes were always appropriate. dame schools and the reading and writing schools could be considered private schools since a fee was levied on each student (Seybolt, 1971).

The first known and recorded operating date for a grammar school in the Colonies is 1635. At the time the Boston Latin School was organized and opened to teach boys in preparation for the ministry. Students were accepted at age seven or eight provided they could read simple English sentences. They received instruction in Latin grammar, and if they attended the full seven or eight years they were taught Greek and Hebrew. Not all grammar schools exposed students to the rigor of reading, writing and conversation in Latin, but Boston Latin School prepared its boys for admission to Harvard University, which was founded in 1636. The school was free for residents of Boston, but tuition was charged to those outside of Boston making it the first public and private grammar school (Chamberlain, 1944).

The date of the establishment of the first fully independent nonpublically funded school is unknown, but the first mention of a private school master occurs in Boston records in May, 1666. A Mr. Jones is mentioned in 1667 and in that year, a Mr. Howard established and advertised a private writing school. In 1709 Owen Harris' School offered writing, arithmetic, geometry, trigonometry, astronomy, surveying, graphing, gauging and the use of instruments (Cohen, 1974). The classics emphasis of the Latin grammar school was now being supplemented by a broader, more practical curriculum more responsive to the demands of a larger, more prosperous population.

By 1730, there were numerous advertisements in the Boston newspapers for private school academies. At first the academies were schools for boys only, but some academies offered a female department for girls. The concept of coeducation was not readily accepted, and those parents who wished to have girls further educated supported the establishment of female academies. The curriculum of all academies was a departure from that offered by the classical grammar school, and while they did offer a full range of studies which would prepare boys for college, new courses were introduced in response to the preprofessional or business requirements of a growing middle class (Sizer, The academy offered courses of a practical nature such as science, languages and engineering which were taught in the vernacular rather than Latin. The female academies offered studies in literature, music, art, needlework in addition to reading and writing. Administration and control of the academies was usually vested in independent trustees, and because they were often founded by a religious group they usually included a member of the group or denomination sponsoring the academy. Funds were received from both private sources and public sources. Public sources might include tax revenues or defrayment of tax payments. was charged, and the academies were considered private schools.

In 1743 Benjamin Franklin proposed opening an academy in the city of Philadelphia. His concept was to organize a

totally nonsectarian school which would emphasize English, history and mathematics in its curriculum. By 1750 a board of trustees had been organized and the academy opened to students. In 1755 the trustees were predominantly Anglican and an Anglican priest, William Smith, was appointed provost. This combined classical and pragmatic school formed the nucleus of an institution which would evolve into the present day University of Pennsylvania (Good & Teller, 1969).

The later Colonial period, after 1770, saw coeducational schools, girls' schools, and a majority of boys' schools established in the Boston, Salem and Newport areas. These schools offered a mixture of practical and utilitarian courses along with classical studies such as Latin and Greek; this could be interpreted as the result of the influence of Franklin's academy.

The curriculum of the traditional Latin grammar school was being changed and adapted to the economic and social requirements of the new middle class and the pattern of the secondary school as known today was beginning emerge (Chamberlain, 1944).

In the early southern settlements, education of children was also attended to by parents as in New England. However, plantations were scattered and settlements were not cohesive as in the north, so nearby planters might join together, or provide individually, an "old field school", so named because it was located in an old abandoned tobacco

field. If taught by a minister or parson, it would be called a parson's school. The school master could be a minister, servant or planter's wife and was partially paid by a tuition charged each child (Robinson, 1977).

For those southerners of wealth, tutorial education was arranged by them for their children. This English upper class model of education was prevalent for those who could afford it in the mid to late seventeenth century. In 1669, John Carter ordered the first tutor from England for his son Robert. There was a lack of English tutors locally and those who wished to emulate this model of educating their children had to resort to employing, as tutors, "convicts, women and ministers" (Cohen, 1974, p. 131). As the number of students increased at a plantation which had a resident tutor, a special schoolhouse might be built where students would live together during their term of studies. Adolphe Meyer (1967) hypothesizes that this arrangement developed into the American independent boarding school, although Sizer attributes the concept of the boarding school to the academy (1964). For the children of the wealthy, fathers might also serve as tutors, especially in areas of plantation management. Books were few and highly prized and were usually in the libraries of the owners of large plantations.

Both boys and girls were prepared at the plantation schools or by tutors by the middle of the eighteenth century. Girls were not usually exposed to much beyond

elementary reading and writing. Boys had the option of attending private Anglican parish schools, a grammar school, or might be sent to England or Europe to continue their education. If one were to attend a southern university, the College of William and Mary in Virginia had received its charter from the King and Queen in 1693, and had also developed its own grammar school (Rouse, 1973).

The transplanting of the social stratification or the class society of England to the southern colonies maintained the educational model of the English. For the poor, education consisted of pauper schools, and church or charity schools and apprenticeships. Education for the merchant class was a function of the Anglican church and its missionary societies. In 1631, in Virginia, a statute required the clergy to provide instruction in the Anglican catechism and the Book of Common Prayer to all youth. The success of this statute and the diligence with which it was enforced might be indicated by a study of male jurors of mid eighteenth century Virginia. This study indicates approximately half of all adult male jurors were illiterate and "property inventories of the court records indicates the ownership of books was very limited" (Mason, 1976, p. 134).

In the mid colonies controlled by the Dutch Reformed Church, the direction and development of education was under the supervision of the Classis of Amsterdam in the Netherlands. The Classis was a church organization or committee of directors whose purpose was to endorse teachers

and send them to the New World in response to colonists' requests (Meyer, 1965). The church and the village financed a portion of the schoolmaster's salary, and each child was charged a tuition fee. The school was in the service of the Dutch Reformed Church and reading and religion were the primary subjects taught, although writing and arithmetic could be included (Adams, 1927). The background and religion of the middle colony settlers was diverse. Netherland was a colony of the Dutch West India Company and its purpose was trade and financial enrichment, so the colonies of this area were open to all who could contribute to this financial operation. Schools were locally established and controlled, and in communities large enough to include several sects, several small private schools would be established for members of each sect. advantage of this fragmented society was that a unique climate of religious tolerance was extended to all (Cremin, 197Ø).

After the English took control of New Amsterdam in 1664, the Anglican Society of the Propogation of the Gospel in Foreign Parts had a significant impact on education, particularly in New York. By 1703 missionary and educational activities were well developed. In 1706 the society donated land and voted monies to support a permanent grammar school and in 1709 it supported the efforts of Trinity Church in establishing schools. The curriculum included reading, writing and arithmetic and a thorough grounding in Anglican

catechism according to the Book of Common Prayer (Cohen, 1974).

Elementary or grammar schools had been organized prior to 1650, but schools offering advanced or secondary level course work did not become numerous until 1700. Incipient academies or private schools, also called advertized schools were developing in larger cities. Many of these schools offered evening as well as day courses in practical subjects. By 1722, Philadelphia, the largest city in British America, had 160 teachers conducting such schools, and in the post Revolutionary years New York had one private school teacher for every ninety families (Wilds & Lottich, 1970).

By the time of the Revolutionary War both public and private schools were flourishing in New England, particularly Massachusetts, and struggling in the Middle Colonies and the South. In New England several conditions combined to create an optimal climate for the growth of education. Settlements were compact and cohesive and were populated by persons with similar backgrounds, political convictions and a common Calvinist based religion. Except for Rhode Island, the New England colonies supported Calvinism as a state religion, and suppressed all others. While there were economic divisions in most communities, the majority of the people were of the working class, and the control of government was not solely invested with the rich. Massachusetts, particularly enjoyed a church state

partnership with leaders who were educated and promoted education as a religious obligation. Leaders wanted citizens to read and comprehend the <u>Bible</u> in order to achieve salvation within the concept of Christian doctrine as the leaders interpreted it.

The southern settlements were not cohesive small villages or towns. Plantation owner families could and did interact with one another, but plantation workers did not. The class structure of England transplanted readily to the south, with marked division between the wealthy and the poor or servant classes. Education was similarly divided according to class ranking. The states did not support the dominant Anglican church, and the clergy were not always dedicated to educational excellence as a component of religion. The servant class assumed the religion of their masters, but the communal and democratic zeal of New England was lacking. Both New England and the south were settled by the English, but as settlers, their only true commonality was language. Education in the south expanded, with private schools for the rich and apprenticeships or indenturing for the majority.

The middle colonies were settled by a mixed population, with many religions represented. Early colonization was under the aegis of the Dutch East India Company whose primary interest was commercial, and education was secondary to the success of commerce. Each individual settlement

tended to attract similar members who shared a common background and religion and who supported their own church school. As settlements grew and the population held varied social, religious and political convictions, each group was protective of preserving its traditions among all the other traditions surrounding it. A general attitude of tolerance for all became a necessity in a melting pot culture, but this removed any impetus for community support of education. When the English took control of the Dutch settlements in 1664, the pattern of nongovernmental, nonreligious interference in education prevailed as it did in the southern colonies (Kilpatrick, 1912).

The postrevolutionary era saw the development of a merchant or business class, particularly in New England the the middle colonies. There was a need for schools which could train men in shipping, banking, and as merchants and accountants. Schools were established and developed which were support by tuition and such schools supported the interests and efforts of those who desired this kind of training for their sons. The Latin grammar school classical training was well suited to those who would become ministers or read the law, or remain gentlemen and scholars. The nonconformist English schools served as a model for the type of education which could provide the practical training more in demand by a changing society (Melvin, 1946). These schools were termed Academies.

The concept of the Academy spread widely in the years between the American Revolutionary and Civil Wars indicating its acceptance by and influence on the population of that period. Although academies were private, fee charging institutions, one can surmise the fees were within the range of many families. Barnard estimated over 6,000 academies were operating in the Atlantic coast areas in 1850 (cited in Kraushaar, 1972, p. 60). Students were not only attracted from the local community, but also from greater distances. Living quarters had to be arranged for nonlocal students with the local families, and for this reason Sizer (1964) states "most academies were boarding establishments" (p. In the 1830's, fifty years after its founding, Phillips Academy, Andover, Massachusetts, built the first known dormitory (Fuess, 1917). By the late nineteenth century most college work was not much more advanced than the curriculum offered by academies, and many teachers were being trained by the academies (Sizer, 1964). However, widespread industrial growth and technological progress required the colleges to evaluate their course offerings with the result that more demanding courses were offered in response to society's demands. More challenging college courses resulted in the academies' focus on more thorough preparation in precollege courses. Some schools were established as preparatory schools for particular universities such as Hotchkiss for Yale, Lawrenceville for Princeton and many of the Boston area schools for Harvard

(McLachlan, 1970). This concept of the college preparatory academy continues today in the independent day and boarding secondary schools.

The academy was not the only type of modern independent school which evolved from an eighteenth century model. The day school had its genesis in the early town schools and church schools of colonial times. Most of the day schools today are elementary schools, or retain an elementary division in a secondary school (NAIS, 1983). The elementary school is more easily organized and established than the secondary school as it does not require facilities such as laboratories or the large libraries of the secondary school. Many elementary day schools have developed around a philosophy or an influential teacher and a group of interested parents, and while some have added subsequent grades as needed or desired, some have elected to remain elementary in focus (Bailyn, 1960).

The day school as a "country day" school emerged during the late nineteenth and early twentieth centuries in response to the demand for schools in the developing suburbs. These original country schools also had an appeal for city families who wished to expose their children to the clean air of the country without the inconvenience of sending them away to boarding schools. Many of these former country schools are now surrounded by cities, however, in 1937 over 100 organized and established a Country Day Headmasters' Association (Kraushaar, 1973). This

association agreed on certain elements which distinguish the Country Day School from other day schools: "(a) a full day program of academic and extracurricular activities, and (b) close home ties with full involvement of parents" (Kraushaar, 1973, p. 77).

The majority of day schools were widely influenced by the progressive school movement which took place between 1876 and 1957 (Cremin, 1961). Many private schools were leaders in the progressive movement, most notably John Dewey's Laboratory School at the University of Chicago. Progessivism developed during a period of great change in American society and was the result of the philosophical and scientific thought of the late nineteenth and early twentieth centuries. Massive waves of immigrants, rapid growth of urban areas, and technological and industrial developments resulting in the modern factory cities, all had their impact on the schools of the day. Darwin's theories and the development of scientific inquiry methods influenced educational philosophies in new ways of problem solving and also resulted in an intellectual climate in which the new study of psychology was being developed (Cremin, 1961). private schools were in a position to respond rapidly to these societal changes because they were small in size, autonomous, and unhampered by bureaucratic structures, and in addition, many were willing to implement the then new methodology developed by Dewey and his associates. A number of day schools also opened at the turn of the century which

espoused particular philosophies such as Felix Adler's
Ethical Culture Schools and the Rudolf Steiner influenced
Steiner and Waldorf Schools (Meyer, 1965).

The period after World War II saw the decline of the Progressive movement and a reappraisal of methodology and curriculum in both elementary and secondary schools (Ozmun and Craver, 1981). The federal government became highly involved in the socio-political processes of education at this time. This reappraisal of methodology and curriculum has not had the impact on private schools which it has had on public schools. Private schools have been free over the years to adjust and change curriculum and methodology according to perceived needs of their clients within the framework of their stated philosophy and goals.

In 1961, James B. Conant perceived a threat to public education if private education received any public funds, directly or indirectly, and further suggested such a plan would ultimately destroy the public school system. Similar prior fears, in the 1920's, resulted in a U.S. Supreme Court decision handed down in 1925 in the case of Pierce vs. Society of Sisters. In 1922 the state of Oregon passed a law requiring that all children attend public schools. The Court declared that while the state has the right to require children to attend school, and can further require all schools to meet minimum standards, parents do retain the right to select a school from among those meeting state standards. This decision reinforces and validates the

American tradition of the dual system of public and private education options. Two U. S. Supreme Court decisions, Cochran vs. Louisiana State Board of Education (1930) and Board of Education of Central School District No. 1, Towns of Greenbush et al. vs. Allen held that the furnishing of loans of publically purchased textbooks to private schools was valid. Both of these decisions were technically based on the Fourteenth Amendment. This same ammendment was used in the case of Brown vs. Board of Education of Topeka (1954) which repudiated the concept of separate but equal schools for minorities. The Civil Rights Act of 1964 added further legislative power. These laws all define the Constitutional right to protect individuals while preserving the delegation of education to the states (Johansen, 1979). Many schools, independent schools, have been organized to avoid compliance with these laws, and their regulation and validation is the function of the courts; however, the Council for American Private Education represents an overwhelming majority of more than 15,000 independent schools whose published policy is one of nondiscrimination (CAPE, 1983). The most recently proposed legislation S528, HR 1730, The Educational Opportunity and Equity Act of 1983 proposed a maximum tuition tax credit of \$300 per child in a nondiscriminatory and tax exempt institution (CAPE, 1983). It remains to be seen whether this proposed legislation will pass into law, and further, whether the private schools would be able to

accomodate any additional students who wish to take advantage of this benefit.

The past decade has seen increased enrollments in private schools in the United States, despite declining birth rates and decreasing public school enrollments.

Increased tuition costs seem not to have affected interest in independent schools. Doyle (1982) suggested that even with a slow growth economy there was an increasingly affluent middle class willing to pay for private schooling. This affluence can be attributed to:

...reduced family size: Fewer children mean more disposable income. The second event has been the delayed onset of first childbearing. More middle class adults earn more as their careers develop. Of even greater importance is the fact that in 50% of two-parent families both husband and wife now work. Two incomes make many things possible that are only a dream for one. Increased financial capacity to attend private school, then, is a major change...(p. 12).

Another factor contributing to the growth of independent schools in contemporary America is a growing public perception that the quality of public education is declining. The Fourteenth Annual Gallup Poll of the Public's Attitudes Toward the Public Schools (Gallup, 1983) indicated only 47% of parents surveyed would choose to send their children to public schools, even if private schools were free. The 45% surveyed who preferred the private

schools did so far the following reasons:

Higher standard of education	28%
Better discipline	27
More individual attention	21
Smaller class size	17
Better curriculum	12
Quality of teachers	11
•••	(p. 47).

A report made by James Coleman, Thomas Hoffer and Sally Kilgore (1982) found that the characteristics which resulted in higher achievement were much more likely to be found in a private school than in a public school. They found private schools imposed more strict disciplinary rules and maintained greater order in the classroom. Private schools were more rigorous in terms of homework, and put a much greater emphasis on academic subjects. Keisling (1982) suggested that the quality of teachers which was not investigated in the Coleman Report, bears examination. In the independent school, outstanding teachers performance can be rewarded with merit pay, and incompetence can be dealt with by firing or not rehiring when renewal of contracts is considered. These findings tend to be corraborated by the responses to the Gallup Poll previously cited.

Independent schools see their services as complementing those of the public schools in providing an alternative form of education. John C. Esty, president of The National Association of Independent Schools said "I hope people

concerned about public education will learn something from the reasons why people choose independent schools" (cited in Maeroff, 1981). The independent schools once thought of as institutions for the rich are becoming alternative schools for the upwardly mobile middle class in the 1980's.

## Evolution of the Kindergarten

During the eighteenth century while American educators were adapting and changing the model of the English school and the concept of tutorial education, European philosophers were questioning the concepts of educating young children. During this period education was based on the use of books. Children were introduced to reading and once reading was mastered education could commence. Knowledge was considered independent of sensory experiences.

Jean-Jacques Rousseau (1712-1778) emphasized the value of the study of the development of the child and subsequently designed a curriculum which was appropriate for the development level of the child to ensure he would realize his potential. Rousseau placed feeling above meaning and humanity above reason. He condemned education which was totally confined to the use of books and languange for the purpose of molding the child to a standard of conformity. In his first paragraph in <a href="Emile">Emile</a>, Rousseau (Foxley, 1969) writes, "Everything is good as it comes from the hands of the Creator of Nature; everything deteriorates in the hands of man" (p. 1). Rousseau theorized that there

was a state of naturalness or of perfection, which man had enjoyed prior to being civilized. Adults could return to this perfect state by adapting the natural ways which children enjoyed and practiced. Children were born good, he determined, and the aim of education should be to preserve this goodness throughout life in order to shield the child, in particular, from the evils of society. Rousseau felt education was an antidote to society and social organization and that adults could also be educated to return to this forgotten state of innocence (Green, 1914/1969).

Rousseau's theories proposed the exclusion of the individual from society and although his resulting educational philosophy is not supported by current thinking, his general principles of education provided a rationale for and a perspective of the developmental processes of the young child which predated Darwin's work by a century. thinking of Rousseau's era accepted the characterization of children as miniature adults, but Rousseau observed that, unlike adults, children engage in almost all activities spontaneously, and these activities if not repressed would provide the foundation for education. The obligation of the teacher, then, becomes one of encouraging activities and curiosity, rather than confining learning to the more narrow focus of mastering the contents of books. Rousseau, in his philosophy laid the foundations for pragmatism and progressive education (Boyd, 1911/1963). Rousseau's general principles are still of value to teachers of young children:

Ideas before symbols; things before words; nature before books; practice before theory; what the child is instead of what we wish him to be; what he thinks instead of what we think, what he can learn, instead of what we think he ought to learn; a reasoned plan instead of additional practice; the art of observing and knowing the child, instead of the art of explaining the subjects of instruction (Gunn, 1906, p. 56).

Johan Pestalozzi (1746-1827) was influenced by Rousseau's philosophy, but within the context of man as a social animal and as a member of society. Pestalozzi shared Rousseau's belief in the goodness of man and the theory that individual differences influenced development. Pestalozzi expanded on Rousseau's principles and developed his own theories as a teacher in actual association with young children. This close contact with young children made him receptive to the idea that education began at birth with sensory impressions (Green, 1914/1969). A logical extension to this concept was that children should experience many things before they are exposed to books and verbal instruction. In his contemporary commentary Moore (1971) concluded the teacher "must be prepared to teach a process by which words are attached to their referents and to begin with objects and actions in the child's own environment" (p. 28).

Pestalozzi was a mystic and his philosophy was never clearly nor concisely framed by him (Silber, 1960). Like

Rousseau, however, his principles emerge from his writings. If early education was derived primarily from sensory experiences, then the child's own observations, activities and experiences provide the basis for the acquisition of words and the meanings of words. Exploration of one's environment is the beginning of knowledge, and the more the young child explores and senses his surroundings, the more readily he can connect knowledge of things with words about things and concepts about things. Exploring surroundings requires activity on the part of the child and the activities themselves require exertions, not passive reception. The young child's actions and resulting perceptions educate him or her, not the explanations and talk of teachers. Pestalozzi provided experiences which were not mere busy work, but life related activities such as gardening and building (Heafford, 1967). Pestalozzi further proposed the order and rate of exposure to more advanced and abstract concepts should be determined by the child's abilities and background, not just the teacher's idea of an appropriate age related time frame. If the teacher used the child and his level of development as a foundation for educational decisions then the teacher had a reference within which experiences and instruction could be planned to aid in the orderly and systematic acquisition of knowledge (Lambert, 1958). This systematic theory of instruction anticipated many of the fundamental early childhood education precepts of today.

If one ascribes validity to these principles of Pestalozzi on the basis of his recommendations and practices, then one can extrapolate from them a philosophy of early education which is grounded in the appropriateness and thoroughness of the experiences of the young child. Acquisition of knowledge progresses with the development of the child as the referent so he or she is not overwhelmed or intimidated by exposure to inappropriate tasks and information.

Strongly influenced by Pestalozzi was Freidrich Froebel (1782-1852) who was a teacher of young children at the Pestalozzi Institute in Yverdon, Switzerland. Froebel's views of educating young children were developed within the context of German transcendental philosophy (Ulrich, 1945). This philosophy and Froebel's expression of it tends to obscure some of his writings and the meaning of some of his statements remain unclear, however his assurance and acceptance of the concept of a central unity of all things was never obscure. "The most pregnant thought which arose in me at this period was this: all is unity, all rests in unity, all springs from unity, strives for and leads up to unity and returns to unity at last" (Froebel, 1889, p. 40). Froebel's standards of measurement for evaluating programs were "unity, inner connections and an ordered whole" (Weber, 1969, p. 2).

Froebel was exposed to Pestalozzi's emphasis on music and play and their value in the educational experiences of

young children. When he founded his own school, play, music and activities were central to the program and were motivated by the interests of children. This early school was not successful, but his interest did not diminish. In 1837 he started another school for young children which he named Kindergarten in 1840. In this second school, play, games, songs and activities were also a significant part of the program (Snider, 1900).

Pestalozzi had contributed the concept that children observe, then think, then act. Froebel extended this observation into a more comprehensive philosophy by describing a rational system of training young children and promoting overall development in terms of the unity of self with all forms of life and especially with God (Gutek, 1972). If the purpose of life is sequential development, then development in all facets of life is systematic and interconnected and comes from within the organism in its particular environment. Froebel sequentially and systematically described and organized a curriculum which was compatible with his philosophy and Pestalozzi's principles.

The core of the Froebelian curriculum was "gifts and occupations" (Froebel, 1889, p. 285). The gifts can be described as manipulative materials and objects which included solids such as balls, cubes, spheres, cylinders and sections of each. The sizes and materials of composition were precisely defined: the base was one square inch, the

composition was of wood or wool yarn. The gifts introduced the child to the nature of form, number and measurement and Froebel described in Pedagogics of the Kindergarten (1895) very precise ways in which the objects were to be used by the children. Each individual gift was used alone until all possible experiences had been gained and all combinations exhausted, then that gift was combined with another gift and the process repeated until the entire set of gifts was known. This procedure was expected to take several weeks to complete and Froebel thoroughly delineated each set of objects and the sequential manner in which it was to be investigated. The occupations consisted of specific tasks to which children were exposed with the initial goal to experience the occupation and the final goal to then master it. This included folding paper, cutting paper, woodworking, carving, lacing, weaving, embroidery, drawing, and bead stringing (Graves, 1912).

With his initial successful school Froebel established other schools for children and involved himself in training kindergarten teachers in his methodology. That the kindergarten movement had become a potent, cohesive force in Bavarian society is indicated by the passage of a law in 1851 prohibiting the organization of a kindergarten unless it was under the supervision of a Protestant Church (Salmon and Hindshaw, 1904). In May, 1852, the opening address of the Fifth Conference of Teachers in Bavaria was delivered by Dr. Schulze on the "Nature, Object and Effect of Education

Generally of the Kindergarten Movement" (Hanschmann, 1897).

In 1849 Froebel's principles and methodology were the subject of a series of lectures given by him in Hamburg, Germany (Froebel, 1889). Several Americans were in the audience, all members of the Meyer family: Margaretha Meyer, Adolph Meyer, Bertha Meyer Ronge and her husband, Johannes. Bertha Ronge carried Froebel's ideas to England where she and her husband opened kindergartens in Manchester and London. Margaretha Meyer assisted in her sister's London kindergarten, and it was in the Ronge home that she met her future husband Carl Schurz. After their marriage they moved to Watertown, Wisconsin in 1852. In 1854 Bertha Ronge organized a display of Froebelian kindergarten materials which were presented at the International Exhibit of Educational Systems in London. One American visitor to the display was Henry Barnard, then Secretary to the Connecticut Board of Education (Vanderwalker, 1908).

In 1856, in Wisconsin, Margaretha Meyer Schurz opened a Froebelian kindergarten for her own children and relatives. This German language kindergarten did not expand beyond family and a few friends although it did move from the Schurz home to a storefront in Watertown (First kindergarten, 1956, August 4). This small school might never have become known except for a chance meeting in Boston of Mrs. Schurz and Elizabeth Peabody, a prominent Bostonian. Miss Peabody was so influenced by Margaretha Schurz that she opened her own English language kindergarten

in Boston in 1860. Her enthusiasm grew and at the age of 55 she became a student of Froebel at his Hamburg training center and subsequently visited Baroness von Marenholtz-Bulow's kindergarten seminary. On her return to New England, Miss Peabody was in great demand as a lecturer, author and interpreter of Froebelian principles and theories (Tharp, 1951).

American interest in the kindergarten program continued to develop in the United States, but German trained teachers from the Froebelian training schools were considered the most desirable. Teacher requests were sent to these schools and teachers were then sent from Germany to introduce the correct Froebelian methodology and philosophy in the United States (von Marenholtz-Bülow, 1879).

These new principles of education continued to be of interest to educators and the early American kindergartens are typified by their adherence to Froebel's procedures and their close ties to their German origin. As the demand for this new education developed, teachers in the United States began training prospective teachers. In this way the methodology was transferred, but Froebel's rationale was excluded (Walz, 1936). Mrs. Louise Pollack founded the first known teacher training school in a kindergarten she was conducting in Washington D.C., in the late 1860's (Lucas, 1972). In 1872, Maria Boelte established a teacher training institute in New York City. This school would

include among its students, Susan Blow, the first public school kindergarten teacher (Cubberly, 1922).

Henry Barnard expressed his enthusiasm about the Froebelian materials and methods he had observed in London when he returned to Connecticut in 1854. After assuming the office of United States Commissioner of Education in 1867, Barnard continued his support of the kindergarten movement by assembling kindergarten literature in English for use in the United States. His personal interest in, and many publications on this topic "fathered the kindergarten movement in the United States" (Thursfield, 1945, p. 334).

Another educator, who would also hold the office of U.S. Commissioner of Education, developed an interest in this new method of educating young children. In 1870, William Harris, then Superintendent of Schools in St. Louis, Missouri, introduced the concept of the kindergarten to the public school board and proposed it be added to the school curriculum. Three years later, in 1873, Susan Blow, a teacher trained by Maria Boelte, was located and she agreed to direct a kindergarten and to train a teacher in the first documented public school kindergarten (Curti, 1965). enthusiasm and support of two powerful Commissioners of Education, Henry Barnard and William Harris, provided opportunities for the growth of the kindergarten movement in the United States between 1870 and 1890, but their support and influence does not explain the rapid acceptance and success of the kindergarten as an addition to the

curriculum. Educationally and philosophically, the United States had borrowed from the Europeans. French humanitarianism was influential in the period after the American Revolution, and the English contributed technological developments and a spirit of individualism. German idealism and the transcendental philosophy influenced many in the latter half of the nineteenth century, and this influence was strongly felt in the philosophy of educating children as a benefit to society (Weber, 1969).

In 1870 there were less than a dozen kindergartens in the United States; in 1880 there were not less than four hundred scattered over thirty states; by 1890 associations working for the expansion of kindergarten education existed in many cities (Vanderwalker, 1908, p. 50).

Kane (1954) states that by 1898 there were 4,363 kindergartens involving 389,604 children and 8,937 teachers.

The rigidity of Froebel's system and prescribed methodology is counter to the twentieth century trend of free play for young children, but Froebel developed and pioneered the concept of providing activities for the purpose of educating the young child. In addition to an emphasis on activities and tasks as opposed to books, Froebel recognized and encouraged songs and rhythms for their own pleasure as well as for their educational value. He encouraged close relationships between home and school to develop a shared consistency in values he felt worthwhile.

His emphasis on the social atmosphere of the kindergarten continues as one of its most universal characteristics.

G. Stanley Hall (1844-1924) proposed and developed a new method for the study of children which was grounded in scientific observation and Darwinian theory as opposed to idealistic philosophy. Hall's population for this scientific study of young children were the kindergartens in the Boston kindergartens supported by Pauline Agassiz Shaw. By using case studies, questionnaires and an analysis of data obtained, he collected information on young children's interest, fears and types of play. It was Hall's belief that this information, made available by him, would provide evidence of "the width and depth of the chasm which yawned between the infantile and the adult mind" (Hall, 1924, p. 381).

As President of Clark University in Worcester,

Massachusetts (1889-1919), Hall organized a program for the

study of the child. Many of those involved in the

kindergarten movement came to study in this new field of

child development. One of Hall's major departures from the

methodology of Froebel was the emphasis placed by Hall on

the value of physical development. Froebelian activities

were sedentary and involved the use of small muscles and

fine motor control. Hall proposed that development

proceeded from gross or global development to the refinement

of specific or fine motor control. He then hypothesized

free movement should be emphasized and encouraged before

precision was attempted. Hall further proposed that development was evolutionary in nature according to Darwin's theories, and that each stage in individual development was preceded and followed by a specifically characteristic stage. A rich environment of appropriate activities and materials would then foster development and facilitate the transition of the next stage. The developmental stages would define "the norm for all the method and matter of teaching" (Hall, 1924, p. 500).

In 1895 Hall extended an invitation to 35 kindergarten teachers to meet with him for a scientific study of the child. After the initial address by Hall explaining his child study theories, 33 teachers walked out, leaving only Anna Bryan and Patty Smith Hill (Osborn, 1980).

Edward L. Thorndike (1874-1949) was conducting experiments in his laboratory at Columbia University Teachers' College on the psychology and physiology of learning while Hall was attracting converts to his Child Study movement. It was Thorndike's opinion that it was the business of teachers to encourage acceptable habits in their students and to inhibit inappropriate habits (Cole, 1959). Thorndike's research was conducted with laboratory animals and his laws of stimulus response learning and his theory of connectionism were based on the behavior of laboratory animals. Acceptance of Thorndike's psychological precepts and educational theories were long delayed because of his use of animal subjects. In addition, his results and the

relationship between animal and human behavior was dependent on an acceptance of Darwinian theory of continuous evolution of the species. Thorndike's theories were delayed in their influence on education because they were too radical and revolutionary at the time they were first proposed in the early 1900's.

Thorndike explained his laws of learning in relation to the kindergarten in 1903:

The law of readiness meant the best time to form a habit was when the tendency was ripening. The kindergarten child was ready to examine and manipulate concrete objects, to engage in simple imaginative play and to observe simple social forms. In connection with the law of exercise, five year olds do not hold events in memory for very long and this has implications for developing associations. The law of effect should be stressed because not all native tendencies of this age should be strengthened by satisfying effects (Thorndike, 1903, p. 54).

As the kindergarten movement expanded, changes in the Froebelian method were proposed and put into effect by some teachers. A major schism developed between the traditionalist followers of Froebel and the progressives who formed the International Kindergarten Union (today the Association of Childhood Education International, or ACEI). The Union was composed of teachers, kindergarten directors and teachers in kindergarten teacher training programs who

proposed deviations from and expansions of the prescribed Froebelian methods. Hall and Thorndike's scientific studies were anathema to the Froebelians with their philosophy of introspection as a method of acquiring knowledge, but the progressives did recognize that while child study and scientific experiments described and provided for comparisons of development, they did not provide clear direction for the kinds of changes to make in the kindergarten curriculum.

M. J. Holmes (1907) in the preface to The Sixth

Yearbook of the National Society for the Scientific Study of

Education, states it "reflects the teachings of Froebel as
he enunciated them, without the accretions or modifications
of recent years...one finds here a sympathetic and intuitive
presentation of the claims of childhood...with such
directions for their use as Froebel deemed essential" (p.
8). The title and second chapter "The psychological basis
of the kindergarten" (Kirkpatrick, 1907, p. 19) further
underscores the philosophic rift in kindergarten education
in the early 1900's. The followers of Froebel led by Susan
Blow were challenged by the progressives led by Patty Smith
Hill, in a controversy over methodology and philosophic
principles which continued until the 1920's.

Patty Smith Hill (1868-1946) was one of the two teachers who remained to hear Hall's 1895 seminar on the child study movement. She continued to study under Hall and became a proponent of his theories on the maintenance of

good health and the physical and emotional development of These ideas became part of the kindergarten she codirected in Louisville and which was included in John and Evelyn Dewey's School of Tomorrow (1915). The new methods attracted many visitors including Francis Parker and John Dewey, under whom Hill studied further. In 1905, Hill jointed the faculty at Teacher's College, Columbia University. While there, Hill developed climbing apparatus, large blocks and she encouraged both free play and dramatic E. L. Thorndike assisted in adding to this kindergarten program habits and activities which he theorized would produce the desired changes in feelings and behaviors of young children (Kilpatrick, 1916). In 1921, Hill established the Laboratory Nursery School at Teachers' College at Columbia University. The emphasis on large muscle development, emotional and physical well-being were distinctly antiFroebelian.

At the time the progressives and traditionalists were vying for control of the American kindergarten movement, the theories of Maria Montessori (1870-1952) were being practiced in Italy. Dr. Montessori, a medical doctor with an interest in the poor, opened her Casa Dei Bambini in Rome in 1907. Here children of poor working mothers were provided with school for six to eight hours daily in children's houses (Montessori, 1936). Montessori was experienced in working with mentally handicapped children and she was aware of the work of Seguin in France in the

education of the retarded. She developed from Seguin's materials and from the concepts of Froebelian materials, a similar system of materials and objects designed to give experience to children in activities which they might not otherwise encountered (Montessori, 1914/1965).

Materials in the Montessori system were developed to provide for specific activities in experiences with color, form and texture, and numbers. In addition to adapting these materials to her curriculum, Montessori redesigned the classroom and the role of the teacher. Furniture became movable and proportioned to the size of the children, and materials in the classroom were organized so children shared the responsibility for locating and returning items. In this program the child's instruction was individualized and he or she had the opportunity to work individually and with a group. Montessori made available to each student an atmosphere of self direction with the teacher guiding the learning experience; the Froebelian methodology relied more on teacher direction (Monroe, 1925).

Dr. Montessori insisted that work must be adapted to the child's level of ability, and focused the attention of teachers on the importance of individual differences. Her materials were designed, in many instances, to be self correcting, and thus further removed the teacher from a position of dominance in the classroom. Independence of both child and teacher, one from another, was the goal of this program. Sensory training was equally important, and

while Dr. Montessori made no claims for it increasing a child's intelligence, she felt a child might develop a finer sense of discrimination than one not so similarly trained. The ability to discriminate more keenly or with greater subtlety might heighten one's consciousness in various experiences and make him or her more receptive to and less apprehensive about new experiences (Montessori, 1967).

Reports from those persons who visited Rome in 1913 and 1914 were generally skeptical about the introduction of this system in American kindergartens. Despite receptiveness to the concept of the less directive teacher role in the Montessori system, the visitors generally felt the principles of Froebel and the new progressive movement were better suited to the educations of kindergarteners in the United States (Kilpatrick, 1916).

The Montessori philosophy of educating the child was, in its organization, not group oriented; the emphasis was on individual practice and experience. Children, however, were encouraged to develop practical knowledge of hygiene, housekeeping, building, agriculture and gardening. There was opportunity provided for children to participate individually yet mutually in the classroom, and many of the tasks have as their purpose, improvement of home life. In this way, Dr. Montessori encouraged parents' participation in their children's education (Montessori, 1914/1936).

Omitted from the Montessori system or program was the concept of free play. Montessori has many manipulative

materials designed for specific tasks to be mastered or for a particular type of developmental training, but their use was defined and prescribed as spontaneous play with such materials was not part of the Montessori curriculum. The exclusion of songs, rhythms, drawing, painting and dramatic or free play was also a significant omission from the kindergarten curriculum of Montessori's lifetime. Joy was derived from the order and mastery of the tasks which were precisely determined.

Montessori's major contribution to the kindergarten movement in the United States was in the encouragement of the participation of children in managing the classroom and in providing an atmosphere in which parents were encouraged to feel welcome as partners in the school and in the educational process. These two contributions defined the school as a social vehicle for the betterment of the community (Standing, 1966). The Montessori movement has been adapted in part, as an enhancement to the child study oriented kindergarten in the United States, but it has never achieved wide spread support or prominence to replace it.

A contemporary of Hall, Thorndike, Hill, Blow and Montessori was the foremost American educational philosopher, John Dewey (1859-1952). John Dewey's philosophy and educational theories influenced all of American education, and in particular the education of children. Dewey proposed the education was life, not part of life. He saw the interrelationship of subjects as a core

curriculum, not isolated knowledge. He proposed experimenting and inquiring as the methodology for problem solving, thus learning. The process and its consequences assumed significance in terms of individual growth and the social environment (Ozmon & Craver, 1981).

John Dewey was chairman of the philosophy department at the University of Chicago in 1896 when he organized an educational laboratory school. The school was open to and included youngsters from age four to fourteen, but they were not divided into rigidly defined grade levels. Dewey's disdain for the Froebelian methodology was strong enough that his four to five year old group was termed subprimary rather than kindergarten. Despite his dislike of Froebel's methods and philosophy, he preferred and did hire Freobelian trained teachers for his subprimary and primary groups, but only after he determined they were flexible in their approach to teaching and pragmatic in their philosophy of education (Eby, 1931/1957). The Froebelian concept of free play and the spirit of group cooperation in concert with activity oriented education were acceptable to Dewey, but Froebel's view of truth as an intuited, idealistic unity was not. Dewey was a pragmatist in his philosophy and his concept of truth was based on a scientific rationale which was observable and which could be tested by the practical consequences of an action.

Froebel determined objects, the gifts, must be known before they can be used, Dewey reversed this theory and

proposed that things which were of interest became known as they were used (Mayhew and Edwards, 1966). In place of Froebel's symbolic gifts, Dewey proposed materials which were well defined in terms of use. Children did not imitate the actions of the teacher and they did not utilize pure imagery by performing imaginary tasks in a make-believe situation. Dewey reasoned that activities should originate with the child, otherwise they were purely imitative and true learning was not taking place. His underlying theme was that young children learned by managing in real life situations of interest to themselves. The ability of the organism to adapt to new experiences was then developed by exposing children to actual experiences in a context unfamiliar to them (Dewey 1897/1929). Dewey stressed throughout his writings that the fundamental purpose of schools was the transformation of society through a new socially minded individualism (Dewey, 1915). The ideas of social responsibility, sharing, cooperation and sense of community are all constantly referred to in his writings about the work of a school as a social institution.

Problem solving to improve activities was a concomitant function of the process of planning, organizing, carrying out and evaluating activities. Understanding the problems and finding solutions were thought to be helpful to children in the overall process of coping with and managing society or environment. Dewey included Froebelian and Montessorian activities such as drawing, music, nature study,

agriculture, form and numbers in the laboratory school, but extended these activities with field trips and cooperative work of a constructive nature such as building a post office or store. Dewey's intent was to use democratic procedures to promote problem solving skills in children which would eventually aid them in adult life in evaluating their work and roles in a changing society (Connell, 1980).

Dewey believed the young child lived and acted in the present and was stimulated by and subsequently readjusted his/her actions according to his or her level of interest in any situation in which the child found himself or herself. If this occurs in an individual or isolated condition the child would then devote his or her time exclusively to the pursuit of his or her own desires. However, societal demands place restraints on the individual for the greater good of all, the school, therefore, as an institution of society must provide for cooperative activities. engaging in these communal activities the individual is exposed to considering his actions in relation to the impact on the group, as well as on himself or herself as an individual. The child or individual has the right to plan and/or act for himself or herself as an individual, but only within the context of helping and learning within the cooperative boundaries of the group (Dewey, 1916/1944).

Dewey reasoned from his observations that a highly developed interest could not be artificially created by a teacher without the resulting information being inadequate

or inaccurate. If activities were provided which were real and developed from the normal, usual activities of the child, assuming that the child were interested in the activities, then learning would occur which was permanent and meaningful. These interests Dewey classified as "social, constructive, investigative and expressive" (Dewey, 1915, p. 45). The curriculum developed around these four interests or impulses and included science and mathematics, language arts and expressive activities, and social studies involving families and societies. Each subject or activity involved motor activities, intellectual planning, using the scientific method of inquiry and research and experimentation—all within the context of group cooperation (Connell, 1980).

In a period of questioning and conflict between

Victorian idealism and scientific inquiry, Dewey's influence

was significant and led to major changes in kindergarten

education. His new curriculum and methodology enhanced or

replaced the older theories and practices of Froebel. Two

major changes were made in schooling at all levels, but

their impact was particularly significant at the

kindergarten level. First, schools implemented Dewey's

philosophy of deriving knowledge from activities and

experiences which were of interest to the student.

Secondly, the child as a student was given the opportunity

to plan educationally for himself within the context of

group membership and the curriculum. Other lasting changes

have included the introduction of the social sciences to the curriculum and forming the practice of connections between experience and education, science and human behavior, schools and society.

The incredibly rich and fertile period in educational philosophy in the United States between 1890 and 1910 had a significant impact on the philosophy of kindergarten education. Contributions to educational psychology, methodology and curriculum relating to the young child were made directly or indirectly by William James in pragmatic philosophy, Franz Boas in anthropology, Thorsten Veblen in economic theory, John Dewey, Patty Smith Hill, Maria Montessori, and Francis Parker in the methodology of teaching, Stanley Hall in psychology and Alfred Binet and E. L. Thorndike in testing and measurement. Research continued in education and the Froebelian mode became a thing of the past, supplanted by the child study movement. The curriculum was developing into one recognizable today. The main changes were increased size and variety of materials, opportunity for creativity, freedom for activity and construction and a social organization which was informed and flexible and which provided for the physical and mental health of children (Lundsteen, 1981, p. 38).

A distillation of all the curriculum and philosophic influences in the kindergarten movement indicate that the kindergarten evolved from adaptations and insights developed in the schools by individuals who worked with young children

and who were sensitive to their needs. A chronological summary of contributions by those described in this study indicates the wide variety of contributions made to kindergarten education.

Rousseau (1712-1778) observed and contemplated and wrote on the spontaneous activities of children which were their way of acquiring learning. He believed children were born good, and acquired education in a developmental sequence as they were ready.

Pestalozzi (1746-1827) recognized education began at birth with sensory impressions, therefore, children should experience things before reading. He proposed that the systematic development of the individual child should determine educational decisions.

Froebel (1782-1852) described and organized a sequential curriculum based on activities of children and their development. He founded the first kindergarten and kindergarten teacher training institutes.

Hall (1844-1924) developed a scientific study of children and enumerated the stages of development with their individually recognizable characteristics. He proposed as additions to the curriculum, studies in health and experiences in large muscle development.

Thorndike (1874-1949). The quantification of educational development and achievement, the science of education and testing were Thorndike's contributions. He

first proposed habit or behavior training as one of the functions of a school.

Montessori (1870-1952) encouraged the participation of parents in the school and focused on personal and social experiences of the child with the teacher in a nondominant role as a facilitator.

Hill (1868-1946) challenged the Froeblian movement with an emphasis on large muscle development and gross motor control, emotional and physical well being. She developed climbing apparatus and the large nursery blocks.

Dewey (1859-1952) stressed the social responsibility of the child and emphasized the interaction of humans with their environment in cooperative activity and problem solving. The individual was encouraged to rationalize activities in terms of group impact and reaction. The scientific method of acquiring information was encouraged in real life situations.

In the twentieth century the kindergarten has been relatively unstructured and flexible. Experiences are usually provided in a general developmental sense, although children may be exposed to prereading and reading skills and prearithmetic or arithmetic tasks. The atmosphere is generally relaxed and a wide variety of experiences are the rule. Crary and Petrone (1971) proposed the following as aims of the kindergarten which help children to:

 Become aware of their physical needs, learn healthful habits; build coordination, strength,

- and physical skills; and develop sound mental and physical health.
- 2. Gain some understanding of their social world; learn to work and play fairly and happily in it; grow in developing responsibility and independence, yet accept the limits present in living in a democratic society.
- 3. Acquire interests, attitudes, and values that aid them in becoming secure and positive in their relationships with peers and adults.
- 4. Grow into an ever deeper sense of accomplishment and self-esteem.
- 5. Grow in their understanding of their natural environment.
- 6. Gain some understanding of spatial and number relationships.
- 7. Enjoy their literary and musical heritage.
- 8. Express their thoughts and feelings more creatively through language, movement, art, and music.
- 9. Develop more appropriate behavior, skills, and understandings on which their continuing education builds.
- 10. Observe, experiment, discover, think and generalize at their individual levels of experience and development (p. 74).

Historic milestones in the kindergarten movement:

1762	Rousseau publishes Emile, or Education and
	Social Contract
1775	Pestalozzi opens home for abandoned children
1801	Pestalozzi publishes How Gertrude Teaches
	her Children
1805-25	Pestalozzi school in Yverdon, Switzerland
1807-09	Froebel at Yverdon
1816-21	Froebel's first school at Keilhau
1826	Froebel publishes Education of Man
1835	Froebel publishes Mother Play and
	Nursery Songs
1837	Froebel's kindergarten at Blankenburg
1844	Froebel opens teacher training school at
	Keilhau
1849	Meyer family hears Froebel lectures in
	Hamburg
1851	Bavarian law limits kindergarten to
	Protestant churches
1852	Schulze address to teachers' congress on
	impact of kindergarten movement. Bertha
	Meyer Ronge opens kindergartens in London and
	Manchester, England
1854	Ronge displays Froebel's materials in London,
	Barnard visits display
1856	Margaretha Meyer Schurz opens first American
	kindergarten; Watertown, Wisconsin

1860	Elizabeth Peabody opens kindergarten in
	Boston
1860's	Louise Pollack founds teacher training
	school, Washington, DC
1867	Henry Barnard, first U. S. Commissioner of
	Education supports kindergarten
1870	William Harris introduces kindergarten
	concept to St. Louis school board
1872	Maria Boelte opens teacher training school in
	New York City
1873	William Harris hires Susan Blow to teach
	first public school kindergarten
1877	Maria Kraus-Boelte publishes The
	Kindergarten Guide
1883	Hall publishes his survey Contents of
	Children's Minds
1892	International Kindergarten Union formed,
	publishes Childhood Education
1895	Hall's lecture about child study method
	influences Patty Smith Hill
1896-1903	John Dewey at University of Chicago organizes
	and directs Laboratory school
1897	Dewey publishes My Pedagogic Creed
1903	Thorndike publishes relationship of his
	learning theories to kindergarten (Binet
	publishes his study of intelligence)

1904	Department of Kindergarten opens at
	University of Chicago and Teachers' College,
	Columbia University. Dewey transfers to
	Columbia University
1905	Patty Smith Hill appointed to Teachers'
	College, Columbia University faculty. Works
	with Thorndike on classroom habit formation
1907	Montessori opens first Casa dei Bambini, Rome
1908	Thorndike begins research on testing and

1913-14 American visit Roman Montessori schools
1921 Hill opens Nursery Laboratory school,
Teachers' College, Columbia University

measurement

1926 National Committee on Nursery School founded (now National Association for the Education of Young Children), publishes Young Children

In 1940, 661,000 young children were enrolled in kindergartens in the United States, By 1980, 2,500,000 or 85% of all five year olds were estimated to be attending prefirst grade programs (NCES, 1982, p. 45). As reported, there is increased interest on the part of parents in early childhood education, and there is greater need for programs as the numbers of working mothers increase. Current popular thought suggests the first five years of life are critical in the development of social, emotional and cognitive behaviors (Margolin, 1976). A rich environment assists in the acquisition of language, in social behavioral responses

and in the development of values. The significance of the child's environment as previously reported by educational philosophers is well expressed by Whitman:

There was a child went forth every day,

And the first object he look'd upon,

that object he became,

And that object became part of him for the day or a certain part of the day,

Or for many years or stretching cycles of years....

These became part of that child who went forth

every day, and who

Now goes, and always will go forth every day.

"Rivulets" from <u>Leaves of Grass</u>

Walt Whitman (1959)

# Evaluating the Abilities of Kindergarten Children

One important concern of the independent elementary school is the identification of kindergarten applicants who can benefit from a particular school's educational program. Allan Shwedel (1980) and others (Barbe and Renzulli, 1975; Clark, 1980; Gallagher, 1975; Roedell, Robinson & Jackson, 1980; Roeper, 1977) caution that identification procedures should be closely related to the goals for children established in an individual school setting. The match or fit between the child and the school program is essential if growth and progress of the child is to be optimized. Hunt

(1969) refers to this as the "problem of the match" (p. 129) and hypothesizes that if learning is to take place, that experience must be appropriate to and developed on the child's previously acquired knowledge base. The match between child and school program in an independent setting should be determined by the developmental level of the child and the educational goals and experiences provided in the school.

At the present time there is strong parent interest in independent schools (Maeroff, 1981) despite the obvious additional cost to parents. The Council for American Private Education (CAPE) estimated in 1980-81 that 62.7% of families who sent their children to private schools earned less than \$25,000 per year, and further reported that 10.4% of those children are minority students. Admission procedures and standards are clearly being scrutinized by school officials in order to best identify those youngsters who can succeed in a given school Shertzer (1960) wrote:

Identification may be defined as assessing the abilities and talents of students in school and selecting those students who meet the criteria established by a program. This assessment may include standardized tests and inventories, observational techniques, teacher judgments and screening of previous records of behavior (p. 105).

DeHaan and Havighurst (1957) caution that identification is not just a goal in itself, but a means of

matching each child with a program best suited to that individual's particular abilities. DeHaan (1957) further suggested that identification procedures should be functional, systematic and inclusive. Carol Epstein (1979) stated:

The school must establish a system for identifying participants. Methods will depend on the type or types of [children] served, the nature of the population from which participants will be selected and the resources available to the school (p. 75).

It was noted in Hess and Croft (1972) that "from the teacher's point of view, the most significant functions of evaluative procedures are to diagnose growth patterns and achievement levels of her class and establish learning objectives for both individual children and the group" (p. 316).

The assessment of young children is controversial (Hein, 1975; Macdonald, 1974) and the controversy concerns the methods utilized, the recording of data and the reporting of data collected. The development of young children is very uneven and there are no national norms available to establish what constitutes adequate or normal general development (Barnes, 1982). Gallagher and Bradley (1972) and Satz and Fletcher (1979) have published complete appraisals of the problems associated with assessing young children and these can be useful to persons in admissions testings. There are few predictive relationships between

characteristics of young children and specific school learning; however, a total pattern of interactions can be of some significance in evaluating candidates. Decker and Decker (1976) felt that the assessment, recording and reporting of children's progress served as a basis for many worthwhile functions such as "planning and implementing all services of the early childhood program, guiding the development of each child, and communicating with parents" (p. 155). Some of the apprehension of the public revolves around public perceptions of identification and evaluation consisting only of paper and pencil tests and a concern that evaluating young children is a traumatic experience for the child. This may be accurate, however, Goodwin and Driscoll (1980) stated "educators working with young children are generally careful to do them no harm" (p. 8). independent school applications increase "parents to through the crunch, financial and emotional, in hopes of ensuring that their children will be able to make it at good elementary...schools" (Pierce, 1980, p. 78). psychological stress on applicants and their families trying to gain entrance to highly desirable independent school kindergartens will not defuse this controversy, and so it becomes incumbent upon admissions personnel to utilize as many evaluative techniques and methods as are reasonably possible with the highest degree of professional integrity. In this manner the process is objectified and serves the best interests of the child and the school.

Many of the studies reporting on the use of assessment and evaluative techniques and instruments for young children, age four to six, involved the gifted or educationally or physically handicapped as their sample. The highly competitive private schools tend to attract the families of children who perceive those schools as providing a "higher standard of education" (Gallup, 1982, p. 47). For this reason, assessment and evaluation techniques for the identification of the gifted will be reviewed in this portion of the study.

## Identifying Gifted Children

Characteristics of the gifted and definitions of giftedness have been proposed in many ways, by many people. These include the U.S. Office of Education's description which identified gifted children as:

Children capable of high performance...with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination:

- 1. General academic aptitude,
- 2. Specific academic aptitude,
- 3. Creative or productive thinking,
- 4. Leadership ability,
- 4. Visual and performing arts,
- 5. Psychomotor ability (Marland, 1972, p. 2)

Giftedness has been characterized by "a high score on a standardized intelligence test, then identification of

nonintellective characteristics that distinguish these high scoring children from children with average scores" (Roedell, Jackson, Robinson, 1980, p. 8). Terman and Oden in 1926 designated those children with IQs of 130 and above as gifted. Ward (1962) categorized general intelligence, and specific aptitudes or talents as measured by valid and appropriate tests, as major qualities of giftedness. (1979) writes "the most common standards among states [N=38] using intelligence tests, however, appears to be a minimum intelligence score of 130 or the attainment of at least two standard deviations above the norm on an intelligence measure" (p. 66). Chen and Goon (1976) describe the criteria for inclusion in New York City's gifted population as achievement of two or more years above grade level in reading and one and one-half years above grade level in mathematics as indicated by the Metropolitan Achievement Tests, in addition to an evaluation of one's personal qualities such as initiative, capacity for sustained work, and good health. Birch (1954) described the mentally advanced five and one-half year old child as one who was mature, with a superior reading aptitude and a MA of seven or greater, and an IQ of 130 or greater as measured by a standardized test. Karnes and Bertschi (1978) identified children for acceptance in the University of Illinois gifted preschool programs on the basis of extraordinary academic, verbal and/or intellectual abilities. In 1978, Renzulli identified giftedness as the practical application of above

average intellectual ability, creative ability and above average levels of task commitment. Witty (1940) defined a gifted child as one "whose performance is consistently remarkable in any potentially valuable area" (p. 516). traits, including the recognition of new material, as opposed to learning new material, curiosity, physical and psychological energy, an ability to notice patterns were proposed by Vail in 1979 as some of the qualities of being gifted. Her listing excludes any standardized measures. This research project was limited to independent schools which were designated as college preparatory (grades K-12) or prepreparatory (grades K-6 or 8) by Porter Sargent (1982). Clark's definition of giftedness was selected by this researcher as a definition which was neither all encompassing, nor one dimensional: "gifted refers to people who have developed high levels of intellectual ability or who show promise of such development" (p. 4).

Recommended techniques for assessing gifted children are also many and varied. Rubenzer (1979) cited the following assessment techniques being used in California and Illinois: "standardized tests (top 5%), past performance, teacher and supervisor recommendations, peer identification, and observations" (p. 305). Jackson (1980) reported a similar system, and added to Rubenzer's list "information from parents...[and] a review of the child's work (p. 27). Clark recommended multiple measures, and emphasized the value of group achievement and intelligence tests for the

purpose of screening for identification. She felt that actual identification of the gifted requires "individual test administration and the judgment of a selection committee" (p. 117). A multiple screening process was described by Martinson and Lessinger (1975). This included "teacher judgment, a teacher identification form, the Pinter Cunningham Intelligence Test and the Goodenough Draw-A-Man Test" (p. 235). Approximately 9% were further tested with the Revised Stanford-Binet Scale and identified as gifted, with an IQ above 130. Malone (1974) designed a parent questionnaire entitled the Behavioral Identification of Giftedness. This questionnaire distinguished the behavior of gifted kindergarten and elementary school children from the behavior of the nongifted. The University of Illinois Pre-School Gifted Project (Karnes, Shwedel, Linnemeyer, 1982) reported the use of standardized tests in measuring abilities in three functional areas: intellectual, creative, perceptual-motoric-cognitive. In addition, parents' ratings were used to verify test results. Also developed at University of Illinois was a Pre-School Talent Assessment Guide (Karnes & Taylor, 1978) which assessed talents defined in the U. S. Office of Education description of the gifted. Robert Kruger (1977) has formulated guidelines for the identification of scientifically creative children in grades preschool through five. Another method of identifying talented science oriented youngsters is the "Checklist for Recognizing a Child's Talent in Science" designed by

McIntyre (1982) although she stated "early identification of children who are gifted in science is risky" (p. 45) due to a lack of experience in a variety of science experiences. The Carmel, California school district developed a preschool readiness estimate which included a parent questionnaire, portions of the WPPSI and the Stanford-Binet (Form L-M) and a psychological rating of maturity based on the child's behavior in the testing situation (Smith & Solanto, 1971). The parent fills out the questionnaire during the time the child works with the psychologist which gives the psychologist an opportunity to observe those interactions. DeHaan (1957) reported that the identification procedures in use in Portland, Oregon included standardized tests, work samples, teacher, peer and parent observations. Marland (1972) reporting for the U. S. Office of Education stated "more than 56% of studied gifted programs recommended the use of teacher observations, group achievement test scores, group intelligence test scores, previously demonstrated accomplishments, individual intelligence test scores and scores on tests of creativity" (p. 261). Of these methods, 90% recommended the use of individual intelligence test scores to identify the gifted.

The recommended model for the identification of the gifted, based on previously cited techniques is for the use of multiple measures and techniques. A combination of the most commonly cited measures would include in no particular order, (a) recommendations/information from teachers, (b)

group tests of achievement and intelligence (c) individual tests of intelligence, (d) observations, and (e) information from parents. Peer identification of four to six year olds is not included for obvious reasons.

# Recommendations from Teachers

Teacher recommendations are a widely accepted means of identifying children who might be successful in school. results of teacher nominations, however, are reported to be erratic, and may indicate that the value of such nominations is not reliable. Gallagher (1969) however, felt teachers had obvious advantages in day to day observations of skill levels of children functioning in a school setting. Kirk's 1966 study of kindergarten children indicated that teachers tended to select older children as bright and younger children as slow. Braga (1969) asked teachers to use a teacher rating sheet to evaluate both younger and older kindergarten children and found no significant differences in the ratings. When asked for comments, however, teachers claimed the younger children did not show as high a level of adjustment academically, socially and/or emotionally as did the older kindergarteners. In a 1957 thesis, Burkhardt concluded:

Teachers often confuse achievement with intelligence, that they are inclined to favor the friendly, mild-mannered, well-behaved and hard-working child and to slight the restless, over-inquisitive and non-

conforming child in judging intelligence and that they often fail to consider age-in-grade differences as well (p. 16).

As an indication of the variance in teacher identification of the gifted, Jacobs (1971) reported only 4.3% of gifted kindergarteners were so identified by teachers; Walton's (1961) results indicated teacher judgments alone resulted in the identification of 20% of the children in their classrooms; Ciha, Harris, Hoffman and Potter (1974) reported kindergarten teachers were correct 22% of the time; Barbe (1965) indicated in nominating the highly gifted, teachers were incorrect 25% of the time. highest percentage of nominations from elementary teachers was reported by Cornish (1968). In this study 31% of the gifted students were identified by their classroom teachers. Stevenson, Parker, Wilkinson, Hegion and Fish (1976) reported that kindergarten teachers with three months of observation could predict academic ability over a 40 month time span with a correlation of +.50 (75% of the prediction would result from other factors). These teachers relied heavily on an evaluation of reading skills during the three month period. Mann and Liberman (1982) suggest "phonological awareness and verbal short term memory--may presage firstgrade ability and might therefore be used as part of a kindergarten screening battery" (p. 230).

Recommendations and nominations by teachers are more reliable when some type of guide or checklist is used,

according to Karnes and Bertschi (1978), although design interpretation and evaluation are always highly subjective. Karnes and Taylor (1977) designed a checklist for teacher use in identification, as have others (Ciha, Harris, Hoffman & Potter, 1974; Kaufman, 1978; Kirk, 1966; Male, 1979; McIntyre, 1982; Renzulli & Hartman, 1971). Gear (1978) studied the effect of ten hours of appropriate training and its impact on teacher identification of the gifted. The results indicated trained teachers could nominate 85.5% of the gifted children in their classes, while the untrained control group could identify less than half that number, or 40.3%. The implications are obvious.

#### Parent Nominations

Jacobs 1971 study revealed that 61% of the parents in his sample could identify their own gifted children, as compared to the 4.3% identified by the teachers. Ciha, Harris, Hoffman and Potter reported in 1974 that parents with children in an Illinois public school system could identify 67% of the gifted, but caution that they nominated greater numbers (276) than did teachers (54). Their conclusion was that parent nominations could be useful as a gross screening device, but results of the process would have to be further corroborated by additional measures. Ryan (1975) indicated parental nomination at kindergarten level was strongly related to IQ results, although fewer parents nominated kindergarteners than nominated third

graders in this gifted search. She does conclude that parental information is valuable in corroborating IQ results and in identifying young children. Dickson, Hess, Miyake and Azuma (1979) studied the relationship of mother and child communication accuracy in relation to cognitive development in four year old children and concluded the degree of accuracy in the information exchange could predict the level of cognition both one and two years later in the children. The United States sample was paired with a Japanese sample with correlation of .598 and .599 respectively. The researchers suggest that parent-child communication accuracy is important to the level of cognition in children despite cultural differences. Cornish (1968) inferred from his study that parents do not over-rate the abilities of children, and Cheyney (1962) felt parent information might be helpful in identifying children who could be candidates for further measurement. Parents do observe their children in many activities with different persons under varying conditions and while they may not have experience analyzing and evaluating data about behavior and development, they can record observations and information which can be of value in an assessment process. The Seattle Project ( Roedell & Robinson, 1977) has developed a three part, 44 item questionnaire for parents applying for their children's admission to this preschool project. adaptation of this form is also used by the University of Illinois Gifted Project (Karnes, Shwedel & Linnemeyer,

1982). Ciha et al (1974) indicated parent responses to questions provided an accurate and economical way to assess the child's level of functioning.

### Interviews and Observations

Pierce (1980) reports on a representative kindergarten interview and observation process in an independent school setting: "Parents meet the headmaster, return for a tour of the building, and then bring their young candidate for a visit: finally...the child spends an...hour as a member of a play group" (p. 78). The school personnel may differ from one school another, and the time frame may be condensed or expanded, but this period of mutual observation and interview is common. Previously cited studies (Braga, 1971; Ciha, Harris, Hoffman & Potter, 1974; Cornish, 1968; Jacobs, 19971; Kirk, 1966; Stevenson, Parker, Wilkinson, Hegion & Fish, 1976) indicated the necessity for objective and careful observations. The observer or interviewer must be able to define behavior and performance on a hierarchical, sequential scale. Information elicited must relate to the school experience and be descriptive of the child's current status (Davidson, 1982). Interviews and observations by school personnel reflect the degree of objectivity and quality of preparation of the personnel engaged in interpreting behavior and responses of the applicant in relation to the school's philosophy, program and student expectations.

Cohen and Stern (1973) indicated there were many ways to record data in an observation or interview session, but cautioned that the techniques should reflect the development level of the child and the purposes behind the collection of School personnel should be sensitive to the manner in data. which the child responds to the school environment and its components, how he/she interacts with materials and people, and how he/she functions at his/her particular stage of development. They further suggest that school personnel will want to record behavior in terms of the setting in which the behavior occured, a notation regarding the stimulus for activity or action on the part of the child, and the child's reaction to the stimulus. interpretation of the observations is subjective, and drawn from the observer's experiences and understanding. Checklists may be more accurate and objective in recording children's behavior if each school has qualified the behavior and responses it expects from students. Expectations would be derived from the school's stated goals and objectives, and a knowledge of child development precepts and constructs. An anecdotal record might contain the following: (a) results of direct observation of the child, (b) descriptions which are accurate and specific about events, (c) notations with sufficient description to be placed in context, and (d) separate, identified interpretations about the observation (after Goodwin & Driscoll, 1980).

Feldbaum, Christenson and O'Neal (1980) studied the assimilation of the newcomer to the stable preschool group and found high levels of spatial isolation and off-task behaviors during the first week. By the end of a four week period boys had approximated the original students' interaction levels, but girls had not. McGrew (1972) characterized newcomers as shy, hesitant and anxious in their initial exposure to established group members, and Bronson and Pankey (1977) found that young children typically responded with wariness to unfamiliar or potentially threatening situations. Reports indicate young children are uncertain how to respond in unfamiliar situations, and their responses may to be atypical of their usual behavior. The desire to be admitted to an independent school creates tension and anxiety in their parents also (Hulbert, 1981; Maeroff, 1981; Pierce, 1980; Smolowe, 1981) and this has an impact on the child. Admissions personnel are required to be skillful observers of verbal and nonverbal behaviors in order to objectify the admissions process with sensitivity. One advantage to interviews and observations on the school site is that the site provides a natural situation in which to display school behavior and tasks. Driscoll and Goodwin (1980) state that young children, despite shyness with the peer group, generally are unable to alter basic behavior patterns and sustain new patterns over a substantial time period such as an interview or half day observation. They conclude that children

therefore will display true and spontaneous reactions and activities in a naturalistic setting. Major disadvantages to these measures are the subjectivity and bias which cannot be totally eliminated in the selection of behaviors to observe, and in the observers themselves (Boehm & Weinberg, 1977). Observational methods of measurement can provide an indication of responses, behaviors and reactions which may otherwise not be measureable in children.

#### Testing

Performance on tests can be measured in a combination of two sets of categories: individual and group tests and norm referenced and criterion referenced measures (Shaycroft, 1979). Individual and group measures are distinguished by the number(s) of persons being examined at a given time. Norm and criterion referenced tests are distinguished by the types of scores and their relationship to other scores on the same measure. Norm referenced tests have available normative data or tables of scores derived from the performance of the group from which the data was originally obtained. A test manual will describe the normative group. Any subsequent score's meaning is dependent on its relation to the scores published for that measure. Some measures include local scores in addition to national results because norms vary according to geographical location among other factors. Criterion referenced tests determine whether tasks and/or material

have been mastered according to a predetermined criterion, and have no relation to scores obtained by other groups. Criterion referenced testing with young children should be based on developmental skills and abilities necessary for academic progress (Southworth, Burr, Cook, 1980). independent school which has designed its own measures should consider standards of mastery consistent with that school's goals and the performance of students who are already enrolled. Expected performance levels would be determined by the performance history of previous students, and peer performance would provide a basis for comparison of applicant scores (Hopkins, 1979). Anastasi (1982) warns these criteria are most appropriate when there is some consensus on the hierarchical progression of skills in basic school subjects. We can then assume that mastery of lower level skills leads to mastery of next level skills within a reasonable time. We cannot assume criterion referenced measures will predict future performance. Anastasi further suggests that learning proceeds sequentially in terms of mastery of skills, and that performance improves as a result of instruction. If components are inappropriately arranged within a skill or learning sequence, then inappropriate judgments about skills levels and inappropriateness of related admissions decisions may result.

DeHaan and Havighurst (1957) indicate tests should be selected on the basis of the kinds of talent and/or the types of information the schools wish to identify and the

reliability and validity of the measures themselves.

The American Psychological Association (1974) has published its Standards for Educational and Psychological Testing. The validity of tests concerns whether tests measure what they purport to measure. Validity should be a special concern to those schools using criterion referenced measures which they have designed and for which there is no reported validity. Three types of validity are:

- Content validity which gives an indication of how well a student would perform in the wider range of tasks the test represents. If a test accurately represents the goals and objectives of a grade level in a school, it has content validity in that instance.
- 2. Criterion validity relates a score or performance level to another relevant task or test. If an independent school admissions test of prereading skills and tasks has criterion validity, it should be so indicated in the school setting by performance on another variable such as reading.
- 3. Construct validity "is a theoretical idea developed to explain and to organize some aspects of existing knowledge" (APA, 1974, p. 29) and explains how to interpret scores on a measurement in terms of the psychological theories behind the scores.

Reliability of a test can be defined in terms of how stable and consistent the test is over a period of time and indicates whether scores are accurate and consistent. Tests can be reliable, without having validity. Validity is more difficult to establish and obtain and those persons engaged in evaluating tests and measures need cautioning that documented reliability is not a substitute for validity.

One advantage of standardized or norm referenced tests is that they can provide a fair and relatively accurate comparison among children of similar backgrounds. They present each individual measured an identical task. If test results are interpreted properly, with consideration given to develomental levels, test anxiety factors, background differences and previously cited potential problems, the results can be "a valuable part of an identification system" (Roedell, Jackson, Robinson, 1980, p. 33). Properly used and evaluated, tests provide much information about general scholastic ability according to Clark, 1980; Lazow & Nelson, 1974.

Feshback (1974) reported group tests were used for kindergarten screening in 55% of the 980 school districts he studied. McFarland (1980) stated that group intelligence and achievement tests are easier and less time consuming to administer. In addition, they can be administered by most school personnel which makes them more economical than tests requiring trained examiners. Studies have shown, however, that group tests are less accurate than individual tests

(Gallagher, 1975; McFarland, 1980; Pegnato & Birch, 1959; Roeper, 1977). If group tests are used with young children, problems might arise including imitative peer behavior, lack of attention and persistence, problems with on-task behavior and parent separation, immature motor development skills. Kaufman (1978) cautions that many test directions include usage of concepts such as alike, next, half, and that it may be appropriate to determine the knowledge level of the child before testing. He concluded that children who do not comprehend test directions are not being assessed with validity. Klein (1982) studied the effects of the stranger as an examiner and parents as test examiners. Among his conclusions were that kindergarten girls perform better for parents on tasks which require verbal creativity, that four and one half and five year olds performed better for strangers on visual-motor coordination tests, and that differences occur according to socio-economic standing, age and sex. Sheldon and Manolakes (1954) point out that group test results tend to be higher for below average students while children who are above average do less well on group tests. Examples of group tests which could be used with five year olds include the California Test of Mental Maturity - 1963 Revision (Sullivan, Clark, & Tiegs, 1963); the Otis-Lennon Mental Ability Test (Otis, & Lennon, 1970); the Metropolitan Readiness Test (Hildreth, Griffith, & Ganvran, 1969); the Stanford Early Achievement Test (Madden & Gardner, 1969, 1971).

The individual intelligence or achievement test provides a more accurate and reliable measure than the group test (Bertrand, 1980; Martinson, 1961; Mercer, Algozzine, Trifiletti, 1979; Rellas, 1969; Sheldon & Manolakes, 1954; Shorr, Jackson, Robinson, 1980). The individual test is not only more accurate in terms of results but puts examiner and child in an intimate situation where the examiner can observe the child in terms of responses and behaviors. The individual test is more costly to administer, and may require a trained examiner. The Terman and Oden 1947 study attests to the predictabilitly of an individual measure. The 1925 Terman gifted group, when reevlaluated in 1947, had an outstanding record of achievement and a far higher number of contributions to society. Anastasi (1982) further concluded that scores of preschoolers do correlate moderately well with later measures of intelligence.

Scores on tests provide one insight into performance, but they do not explain the factors which led to that performance and should, therefore, remain only one component of an identification system, not the sole means of identifying abilities.

### Conclusion

It would appear, then, from a review of the literature that in designing an identification system for kindergarten applicants to independent schools, a range of instruments and procedures should be used which are appropriate to the child's level of development and the school's identified goals and objectives for similar children. Thorndike and Hagen (1977) suggest "placement decisions call for a broad appraisal in an area and can often use standardized tests to identify entry level of performance on an uniform score scale. Selection decisions tend to imply comparisons with others, and for these comparisons adequate norms are often important" (p. 274-275). It is implied also that evaluation or appraisal decisions should include locally constructed tests which would define local performance levels. purpose of the identification system is to place applicants appropriately and most reports of identification recommend multiple measurements and techniques as cited previously. Multiple measures are more likely to reveal more information about abilities of young children, although such systems will never be perfect.

To conclude from a review of pertinent literature, questions which admissions personnel might consider about their own school's evaluation procedures are:

- Does the present standardized measure yield valid and reliable estimates of abilities for students of similar backgrounds?
- 2. Are measures relevant to the school's goals and expectations and are those goals and expectations realistic in terms of past group performance?
- 3. Is information included on behavior reported by parents and/or previous teachers?

- 4. Are admissions persons adequately trained to best interpret the information collected?
- 5. Does the school have the facilities, personnel and funding for an adequate appraisal of candidates?

In order to evaluate an admissions process, a conceptual framework is helpful in making decisions about continuing or modifying components, and also contributes to an understanding about the psychological processes inherent in program planning (Anderson & Ball, 1978). There are many conceptual frameworks for evaluation such as Stufflebeam (1971), Stake (1967), Scriven (1967), Provus (1969) and Tyler (1942). The Tyler framework was selected by this researcher as appropriate for evaluating the independent school admissions process because it focuses on behavioral objectives, which when established, are relatively easy to appraise in terms of attainment. A systematic appraisal of evaluating the congruence between stated objectives and actual performance is an integral part of this procedure. One disadvantage to this procedure is that the objectives may be trivial, and that the processes which are not stated in the objectives cannot be part of the evaluation. Tyler's framework does provide for the evaluation of specific behaviors, which is what the admissions process attempts.

Essential procedural steps in Tyler's framework involve:

 Defining school goals and formulating statements of objectives on those goals.

- Classification of objectives into a hierarchical sequencing.
- Defining objectives in terms of observable behaviors.
- Identification of the situations in which the objectives may be appropriately assessed.
- 5. Examination, selection, trying out of appropriate measures to assess objectives.
- Refinement and/or improvement of preliminary measures.
- 7. Collecting and interpreting the data obtained by comparing student performance with the established objectives. This performance is compared with prespecified objectives based on prespecified school goals (after Tyler, 1942).

After careful evaluation of the process of admissions, and the cautions and concerns about the selection of applicants for admission to a given school, the identification or assessment of abilities remains an imperfect process. Jackson (1978) reminds us that young children's development is uneven, and that ability groups remain heterogeneous in many aspects, so the process of identification should by no means be a final assessment, but, rather a first step in an on going longitudinal process.

An extensive review of the literature revealed no reported research devoted to the specific topic of

admissions procedures for applicants to independent school kindergartens. Contact with the National Association of Independent Schools (NAIS) Admission Services, the Council for American Private Education, and the National Center for Education revealed those offices were unaware of any research in this area. Talbott (1982) stated this research "will be a great asset to our schools." The studies cited indicate a need for research in the independent school setting, and a need for additional research in the assessment of the abilities of young children.

Research designed to provide guidelines for and comparisons between independent school admissions procedures will be of value to educational leaders in independent schools in developing improved, more objective procedures for schools which must make decisions about applicants for admission.

#### CHAPTER III

#### METHODOLOGY

The contemporary National Association of Independent School members are distinguished from one another by their diversity. There are obvious differences between day and boarding schools, denominational and nonsectarian schools, elementary and secondary schools, single sex and coeducational schools; however an even greater variance can be found in the types of students and programs in each school. Students may be accepted on the basis of academic performance which may be high, average or low. There are schools in which the vernacular is a foreign language, and schools which specialize in fine and performing arts, science, mathematics, college preparatory or remedial work, programs for handicapped children and programs for children with psychological problems. The goals and philosophies of independent schools determine whether the organizational emphasis will be college preparatory, tutorial, caretaking, motivational, military, liberal or conservative. Despite the freedom to design and implement any type program desired, each independent school must know intimately the reality of what is successful in its own sphere of influence. This research focused on prepreparatory schools with student populations of above average performance levels.

"Private schools are less easily identified" than public schools according to the U. S. Department of Education (NCES, 1982, p. 48), and a complete accounting of all independent schools in the United States has never been undertaken. Demographic information is available for selected schools and for some unions of schools, but specific information about school methodologies, philosophy and goals, and policies is available only for those individual schools under consideration.

A comprehensive review of reported literature revealed a lack of research regarding this research topic:

Kindergarten admissions practices in independent schools.

Because of lack of reported data related to independent kindergartens, a survey research procedure was utilized to gather information from individual independent schools.

The data gathered by means of survey research methods describes conditions or reveals the status of something. In addition to fact finding, the comparisons of relationships, the identification of trends and the testing of principles are also outcomes of data collection. Accurate descriptions of populations can be useful not only in describing similarities and differences of groups surveyed but in providing data on which to based future investigations. This method can be used as an early component of a study. Hillway (1964) indicated that surveys exploring the

interrelationships of variables were the most frequently used method of data collection (p. 187).

Songquist and Dunkelberg (1977) described the purpose of the program evaluation survey as one of determining the effects of a program or institutional procedures and policies. This type of survey analyzes the stated objectives in terms of the accomplishment of those objectives. The interrelationships of variables which may have an impact on the outcomes can also be explored. Hypotheses may or may not be formulated and tested by the researchers. "Survey objectives often include determination of the multiplicity of the effects of a program, institutional procedure or policy. Studies of this type are very similar to hypothesis testing studies, but often the hypotheses are stated only implicitly and are derived from the practical objectives of the program being evaluated, rather than from theory" (p. 2).

This research study explored the interrelationship of variables involved in independent school kindergarten admissions and tested hypotheses which had been developed by the researcher as a result of the evaluation of such programs.

# Selection of Survey Sample

The diverse nature of organizational memberships available to each independent school served as a means to identify a population which was cohesive. The National

Association of Independent Schools (NAIS) provides active membership to schools which have been in operation for five or more years in states or territories of the United States. They must be incorporated as not for profit and they must meet the standards of and be members of or approved by an appropriate evaluating agency as well as being members of the state or regional association of independent schools. Students and faculty must be admitted/employed without discrimination which is in violation of state or federal laws or regulations (NAIS, 1983).

A second source was also used to further define the research group utilized in this study. The Handbook of Private Schools: An Annual Descriptive Survey of Independent Education, 63rd ed. (Porter Sargent, 1982) lists those schools in its "Leading Private Schools" section which meet the Porter Sargent standards and requirements. This source required schools designated as "Leading Private Schools" to be in operation for seven or eight years, to be verified members of an educational association and to be accredited (usually by one of the six regional associations), to have defined their program as college preparatory or prepreparatory and to show recorded information regarding graduates' subsequent education. Teacher preparation in terms of the types of degrees held and the student to teacher ratio are further criteria for inclusion. school must have broad, national appeal to clientele and not be highly specialized with a program reflecting limited

appeal (Thrasivoulous, personal communication, August 12, 1983).

Schools identified in both NAIS membership lists and designated as a leading private school by Porter Sargent were selected for inclusion in the survey sample. survey sample group was selected by crossmatching the two previous cited listings for the year 1982. Of the 999 NAIS member schools listed in 1982, 441 offered kindergarten programs. Porter Sargent designated 776 schools as "Leading Private Schools", and 420 of these offered kindergarten programs. A total of 340 schools with kindergarten programs were each cited in both listings, and were determined to be the target population. A systematic random sampling (Kerlinger, 1965) of 165 schools served to represent the total population of independent schools in this research. The sample was organized into five geographical areas in order to compare data. Several sources were researched which might provide a model for subdividing the United States. Atlases proved to be inappropriate. While they are divided into geographical areas, the divisions are made for ease in map reading or traveling or locating geographical landmarks. School, or educationally related subdivisions of the United States were located in Gallup, 1982; NCES, 1982; & Porter Sargent, 1982. Inclusion in Porter Sargent (1982) was used as a criteria for sampling, so this source was selected for geographical areas. Porter Sargent (1982) defined eight areas of independent schools. A careful

examination by the researcher indicated three areas (South Central, West North Central, and Mountain SouthWest) could be combined with other areas while still preserving the regional characteristics of the original zones. The new areas which were formed are South Central and South Atlantic, now called South, East North Central, West North Central and Mountain Southwest now called Mid Continent. The three areas were combined because the numbers of schools involved were too small to stand alone in data analysis. The final five geographic regions formed for this research were as follows:

- New England; ME, VT, NH, CT, RI, MA
- 2. Mid Atlantic; NY, NJ, PA, DE, MD, DC
- 3. South; VA, WV, NC, SC, GA, FL, KY, TN, AL, MS, LA, TX
- 4. Mid Continent; MI, OH, IL, IN, WI, MN, IA, MO, SD, NE, AR, CO
- 5. Far West; WA, OR, CA, AZ

In formulating guidelines and making recommendations it is important to include information from professionals engaged in actual practice and professionals whose input is of a theoretical nature. In addition to the 119 admissions directors, information was therefore elicited from professors at universities in the United States which had schools of education involved in child development research, laboratory schools or a testing bureau. The Gourman Report (Gourman, 1982) listed 21 universities having schools of

education scoring between 3.5 and 5.0 on a five point scale. All schools were evaluated on the quality of the faculty, instruction, scholastic work of students, graduate records, administration and nondepartment levels among other criteria. The highest scoring schools, nine in 1982, scored between 4.0 and 5.0; the next level of scoring, 3.5-3.9 included twelve university schools of education. In order to direct the survey instrument with more accuracy, telephone calls were made to each of the schools of education at the 21 universities. A request was made for the name of the person teaching a course in or currently engaged in assessing and evaluating the abilities of young children aged four to six. In some instances the researcher was directed to laboratory schools, the psychology department, bureaus of testing and measurements, or gifted programs in order to reach the appropriate person.

## Development of Instrument

In 1981 the researcher was appointed Early Childhood Academic Services Chair for the California Association of Independent Schools. The major responsibility of this position is to provide the early childhood programming at the annual Southern California state conference of independent schools. In this capacity the researcher was in contact not only with educators in independent schools, but with potential speakers throughout the United States. A simplified needs assessment (Kaufman & Thomas, 1980) was

made in order to plan appropriate program offerings and the results indicated a high level of interest in evaluating young children for admission to independent schools. This interest was expressed by school personnel in other areas of the United States, and this research evolved from the development of these early childhood conference programs.

In May, 1982 a preliminary outline consisting of eight question areas was submitted to professional educators, doctoral students and university professors. All persons contacted were asked to delete or add topics which they conceived to be pertinent to admissions in independent schools. Those persons actively involved in admissions were asked to review their procedures in order to suggest questions which would provide information useful to them.

All information and suggestions were evaluated and many were incorporated into a preliminary pilot instrument for gathering information. Kerlinger (1965) stated "The social scientific nature of survey research is revealed by the nature of its variables, which can be classified as sociological facts and opinions and attitudes. Sociological facts are attributes of individuals that spring from their membership in social groups or sets" (p. 395-396). This preliminary pilot survey was constructed to include as many variables as possible which would impact on the admissions process in the independent school setting. In September, 1982, the prepilot instrument was distributed to graduate students, university professors and independent school

personnel to determine not only the effectiveness and clarity of the language of the instrument, but also to identify any potential problems in the collection and analysis of the data. Suggestions were made and incorporated into an instrument for a pilot study, and any clarifications of language and terminology were also made at this time. A cover letter was designed to explain the pilot study and to request cooperation which would be confidential (Appendix A). The pilot study instrument and cover letter were mailed November 1, 1982 to 24 randomly selected admissions directors who would be excluded from the sample They were requested to make suggestions which they perceived would improve or strengthen the instrument. All questionnaires were coded in order to identify respondents. Respondents were asked to reply by November 30, 1982; if they had not responded by that date, a telephone call was made to the nonrespondent. The final number of replies received was 20 of 24 sent or a total of 83%. A conclusion had been made by the researcher that recommended suggestions and/or changes on the final instrument would be limited to this group whose expertise had been sought. Ten or 50% of the responses included personal correspondence indicating interest in the and support of this research which would validate current procedures or provide information to improve current procedures. Minor suggestions were incorporated to a questionnaire which was designated as a

final questionnaire, provided validity and reliability could be established.

## Reliability and Validity of Instrument

The reliability of the instrument was established by using the results of the previously described studies to exclude or refine or redefine items which were unclear or ambiguous in meaning to recipients. The proposed final instrument was mailed to 20 randomly selected admissions officers who were not to be included in the final sample. A cover letter was included with the proposed final instrument which explained the purpose of the study, requested cooperation and guaranteed confidentiality of responses (Appendix B). To calculate the stability coefficient or test-retest reliability, those 20 persons received the final questionnaire two times, in January and February of 1983. The scores of 17 responses received (85%) were correlated and were in agreement (+.89) indicating answers were consistent in measuring items over a six week period of time.

The validity of the instrument was established by submitting the proposed final instrument and proposed cover letter (Appendix B) to a group of admissions persons differing from both the previous subjects and the final sample. This validation group consisted of 24 admissions officers who were requested to reply by March 15, 1983. A total of 19 (79%) responses were received and analyzed by

the same procedures projected for use in the final research data.

As none of the questionnaires used in the reliability and validity studies reveals missing data or responses, and because no ambiguity or lack of clarity had been revealed after the pilot study corrections, it was determined the projected final instrument was both reliable and valid and would therefore be utilized as the final survey instrument (Appendix C).

## Description of Instrument

The final research instrument included 25 items which were designed to elicit comments and data for the purposes of formulating guidelines for kindergarten admissions and for planning potential inservice sessions. The questionnaire also provided hard data for hypothetical analyses and for comparisons of data. The information requested from independent schools is very sensitive in that it probes the intimate details of a process which has an impact on the financial health and program of a school. The questionnaire further required responses which could be used to evaluate the professionalism of the respondent. The pilot study response rate and the validiation group response rate indicated a high level of trust on the part of the admissions directors who responded.

The initial information requested is of a nonthreatening nature and concerned the founding date of the

school, religious affiliation, if any, and the amount of tuition. Questions were then introduced which addressed the numbers of enrollments, available places, applicant totals, first grade and kindergarten reenrollments and testing fees. This led into the more sensitive areas of how and on which criteria the assessment of applicants and parents are made. The training and experience levels of admissions persons were assessed, as was the time devoted to applicants by various school personnel. A checklist of standardized tests used by the school and a request for any self designed tests were included. The research instrument closed with an evaluation of satisfaction with procedures, a checklist of desired methods of inservice, and a commentary on projected or desired changes.

### Procedure

The survey instrument and cover letter (Appendix C) and its presentation were carefully designed to produce the highest possible response rate from recipients. Research was undertaken to determine the current admissions director at each school. If the name was not known correspondence was directed to "Admissions Director." Some schools with smaller staff do not have an admissions director; the addressee designation was perceived to be appropriate to cause the correspondence to be directed to the appropriate staff member. The estimated amount of time necessary to respond to the questionnaire was determined to be fifteen to

thirty minutes. Additional comments were encouraged by providing space on the questionnaire. A request was made for any self designed tests to be enclosed and returned for use in the research. Permission was requested to include facsimilies of tests in the research, deleting all names and These tests were solicited for use in the identification. formulation of guidelines for kindergarten admissions. A stamped return addressed envelope was included. Postage at the next higher rate was affixed to all return envelopes in the event that recipients added their own materials when returning the original survey instrument. Research indicated mail, especially questionnaires, tended to be discarded when it was considered by addressees to be impersonal (Champion & Sear, 1969; Ferriss, 1951; Gullaharn & Gullaharn, 1963). For this reasons all mail was addressed by hand and all postage was not only calculated at the first class rate, but affixed by individual stamps rather than a postage meter. All correspondence in this project was handled in this way. Each cover letter to an independent school had a brief handwritten note expressing appreciation for recipients' cooperation in order to personalize the project. The return address of the researcher's independent school was utilized to further establish a bond between subject and reseacher. Anonymity was guaranteed to all subjects, as was confidentiality of responses. Each school was, however, assigned a number coded on each return envelope in order to identify nonrespondents. A time line

was developed from conversations with admissions personnel which indicated that the least busy time appeared to be in April and May as most schools processed all applicants and had issued contracts by that time. The questionnaire was mailed with the thought of having it arrive by April 1, 1983, although there was the unavoidable possibility that spring break would occur for many schools during this period, which could delay responses.

A second, separate mailing was made to the 21 university schools of education identified in the Gourman Report as receiving a score of at least 3.5 on a 5.0 scale. In order to direct this mailing with maximum accuracy, telephone calls were made to each school of education to ascertain the name of the individual(s) to whom the correspondence should be directed. The request was made for the name of the person currently engaged in and/or the most knowledgeable about assessing and evaluating the abilities of young children, aged four to six. When an appropriate individual had eventually been identified, a telephone call was made to the person explaining this research and requesting cooperation and information. Two professors contacted each nominated another professor who was perceived as having a high level of interest, expertise, or perhaps unpublished research which might be applicable to this research project (I. Y. Liberman, personal communication, May 10, 1983; D. Slaughter, personal communication, May 9, 1983). These two field referrals were included as valid

experts although neither school of education had been identified as a leading school of education by the Gourman Report. A projected arrival date for the mailing was approximated and an accurate and complete address and telephone number of the individual professor was requested. The mailing included a copy of the independent school questionnaire to indicate the type of information being solicited from each school. A cover letter (Appendix D) requesting specific information was also sent to each professor which could be used in formulating guidelines for admissions procedures in independent school kindergartens. This mailing was not coded because the numbers were limited. It was anticipated that responses would be made on university letterheads, and if not, postmarks would indicate the school by its location. A total of 23 requests were made to universities. Six universities indicated a lack of interest in this research project. The input from these persons and universities was not pursued since it was the position of the researcher that any person solicited for information and cooperation had the right to refuse and that right would be respected. Seventeen university affiliated persons, then formed this portion of the research group sample. Those nonrespondents were followed up by telephone rather than by mail. Where correspondence had not been received a second mailing was sent.

Once the independent school sample and the university personnel had been identified, the research instrument and

appropriate cover letters were mailed to 165 randomly selected independent schools and 17 university professors in March of 1983. A tabulation of responses indicated 112 or 68% of the independent schools responded to the initial mailing, as did 8 or 47% of the university professors. A second mailing was directed to the 58 independent school nonrespondents. The original cover letter was reused. Seven more responses were returned, one indicated the original mailing had arrived the day before the second mailing. It is possible there was misdirection of mail, and perhaps some schools did not respond because the response date had expired before the mail was received. A selected number of nonrespondent schools in California were telephoned to detect whether this nonresponse group was an unbiased or biased group which may have had an effect on the survey sample data (Borg & Gall, 1979). Conversation revealed this follow up group was interested in the research, but it was not of high priority to them. One more questionnaire was returned at a later date for a total of 119 respondents or 72% of the independent school sample. The university responses totaled 11 of 17 or 65%. These responses ranged from very brief statements to inclusions of monographs, prepublication journal articles, and large packets of information.

Question 13 asked respondents to rank order 10 qualities sought in applicants. School respondents and university professors were compared in this ranking. The

purpose was to evaluate what was theorized about the assessment of abilities and what was actually evaluated in the field. In addition to this ranking, a hypothetical assessment process was requested from each professor. This information was included in formulating guidelines for admission procedures in independent schools.

Data were analyzed by the use of the Vax 11/780 computer at the University of San Diego Academic Computer Center. The Minitab (Ryan, Joiner, Ryan, Jr., 1976) program developed at Penn State University was the program utilized. Differences in responses on selected individual items on the survey instrument were tested by the chi-square statistical analysis procedures at the .05 level of significance. The Friedman test was used to analyze rankings of data.

Ranges and measures were calculated for demographic items such as amount of tuition, founding date of school and job experience. Multiple choice items identifying specific procedures were tabulated and ranked by the researcher.

## Methods of Data Analysis.

Each question response was calculated according to information requested. The data were treated by performing an analysis of each survey item.

Range and means defined the responses to questions 1 through 10 and 16.

The percentage of responses and the mean was calculated for question 11.

Questions, 12, 14, 15, 17, 18, 20, 21, 22, 23, 24 were defined in terms of percentages of responses on individual items.

Question 13 was calculated in order of ranking of responses and the Friedman nonparametric statistical analysis procedure was utilized to determine whether the rankings were randomly assigned.

Question 19 was defined by range, mean and number of responses in 12 categories.

Question 25 was an open ended descriptive question. The comments were described in Chapter IV - Analysis of Data. Tables in Chapter IV presented the data for each item analyzed and compared, when such tables were appropriate.

A chi-square statistical analysis procedure was used to measure the significance of the differences between groups on the research questions (See Chapter I, p. 14). The .05 level of significance was used to determine whether the differences observed were significant. This procedure was also used to measure differences between other independent variables in this research. Tables in Chapter IV present the data for each item analyzed and compared.

#### CHAPTER IV

### ANALYSIS OF DATA

The purposes of this research study were to identify procedures currently in use in evaluating the abilities of kindergarten applicants to independent schools, and to compare the reported processes with procedures recommended by early childhood specialists in schools of education in selected United States universities. An analysis of the success of current procedures was made in order to determine any differences between reenrollment rates and the school's reported level of satisfaction with procedures. training and/or experience and role of personnel involved in admissions were evaluated and compared with selected variables having an impact on the admissions process. Guidelines for improving or strengthening the admissions process were developed from an analysis of current procedures, from the review of related literature and from suggestions and recommendations from independent school and university personnel.

Data were obtained from a research instrument, a 25 question survey which was developed by the researcher. The target population for this research were those schools with kindergartens which were 1982 members of the National Association of Independent Schools, and were additionally

designated as "Leading Private Schools" by the 1982 Handbook of Private Schools (Porter Sargent, 1982). United States schools were organized into five geographical regions for comparative purposes: New England, Mid Atlantic, South, Mid Continent and Far West. A random sample of 165 admissions officers in United States independent schools were mailed the survey instrument for receipt by April 1, 1982. Of this total mailing, 119 were returned to the researcher, reflecting a response rate of 72.1%. responses were determined to be adequate for data analysis. In addition to independent school admissions officers, the questionnaire and a request for a hypothetical admission procedure were directed to 17 university professors experienced in the assessment of young children's abilities. Fourteen of these universities were listed among the 21 highest ranked United States of education as determined by the Gourman Report in 1982. Two additional professors were recommended by two of the original 15 professors and they were included in the total of 17. Eleven persons responded, representing 65% of those contacted. The university personnel were asked not only for a hypothetical admissions procedure but were also requested to answer question number 13 on the survey instrument. This question asked respondents to rank order abilities which were perceived by them to be pertinent to success in a reading based kindergarten. This information was then compared to responses from independent schools admissions personnel.

The analysis of this information leads to the framing of guidelines for admissions discussed in Chapter V.

This chapter is organized into two sections. The first section analyzes data responses from each question on the survey instrument. The second section presents the findings related to the hypotheses postulated in Chapter I and also discusses additional comparisons of variables not anticipated in the original framing of hypotheses. The results of this survey are indicated for each of the five regional areas and are presented in tables where appropriate. The results reflect the responses of independent school admissions directors, except where noted. The chi-square statistical procedure was used to analyze and determine the significance of differences on selected items in the research instrument.

## Participant Responses to the Questionnaire

This section presents, sequentially, the responses to each question posed on the survey instrument. Discussion is present for these findings and, where appropriate, tables are utilized to present the data by number and percentage.

## Question 1

This question requested the founding date of the school.

Table 1
Founding Date of School

Region	<u>N</u>	Range	Median	Mean
New England	18	1798-1960	1897	1897
Mid Atlantic	46	1689-1968	1912	1850
South	25	1854-1970	1937	1933
Mid Continent	16	1859-1972	19ø6	1908
Far West	14	1859-1964	1935	1931

Table 1 reveals that the schools with kindergartens with the earliest founding dates are located in the two northeastern areas of the United States. The oldest independent school is the William Penn Charter School, chartered in 1689. The remaining three areas indicated the earliest founding dates are within the decade preceding the Civil War. The median founding dates for all five geographic regions indicate to some extent the influence of the Progressive Education movement on the independent school which is described in Chapter II.

### Question 2

This question requested information concerning any religious affiliation of the school responding.

Table 2
Religious Affiliation by Denomination

Region	Epis- pal.	Roman Cath.	Quaker	Chris. Scien.	Cong- gatnl.		Mora vian
New Eng.		1	1				
Mid Atl.	2	4	4			1	1
South	4				•		
Mid Cnt.	1			1			
Far West	2				1		

Of the 119 schools responding to question 2, 23 or 19.3% indicated they were affiliated with a religious denomination. The two most often cited affiliations, Episcopalian and Roman Catholic, each have their own representative religious school associations. These schools may also hold membership in these groups in addition to their nonsectarian membership in NAIS.

## Question 3

This question asked if the school was graded or nongraded in organization.

Only one of the 119 schools surveyed offered a nontraditional grade level organization. This one New England school was nongraded. This proved interesting because the ability of the independent school to respond to edcuational innovations has traditionally been one of its distinguishing characteristics, yet only one school offered an innovative organization.

## Question 4

This item requested the amount of tuition charged per year in kindergarten programs which are half day, full day and half day with afternoon day care. These numbers reflect tuition for 1982-83.

Table 3
Kindergarten Tuition for 1982-83 in Dollars

Region	<u>N</u>	Half Day Range	Mean	Full Day Range	Mean	Day Care Range	Mean
New Eng.	18	1150-2975	2112	1800-3519	2842	500-1850	1065
Mid Atl.	46	950-4000	2414	1400-4240	3Ø33	500- 750	625
South	25	935-2250	1495	1825-3000	2310	220- 600	386
Mid Con.	16	1325-2230	1727	1740-3950	2772	885	885
Far West	14	1500-3250	2353	2300-3700	2997	1420	1420
Total	119	935-4000	1881	1400-4240	2726	220-1850	1077

Table 3 indicates the wide range of tuitions charged throughout the United States. The highest tuition charged for both full day and half day programs occurred in the Mid Atlantic area where the independent schools are concentrated in the large urban areas of New York City and Philadelphia. The Far West tuition means are second highest to the Mid Atlantic area in both full and half day tuition charges, but highest in day care tuition for all areas. The lowest tuition amounts occurred in the South in full day, half day and day care programs. The second lowest means occurred in

the Mid Continent area and reflected more nearly the national means. The New England region falls between the two lowest and two highest tuition areas, but reported means were higher than the overall national (total) means in full and half day programs, and less in the day care programs. The difference between full and half day program tuitions ranged from an increase of \$1045 in the Far West to \$619 in the Mid Atlantic area. The mean increase for all full day programs is \$770.

Table 4
Length of Kindergarten Day Offered

Region	<u>N</u>		f Day ly		ll Day Only		lf &	Half Car		Hou Ca	rly re
New Eng.	18	8	44%	6	33%	4	22%	6	33%	1	6%
Mid Atl.	46	7	15%	24	52%	15	33%	3	7%	3	7%
South	25	17	68%	4	16%	4	16%	8	32%	3	12%
Mid Con.	16	4	25%	7	44%	5	31%	1	6%	1	6%
Far West	14	4	29%	6	43%	4	29%	2	14%	_	_
Total	119	40	33.6%	47	39.5%	32	26.9%	20	16.8%	8	6.7%

The figures in Table 4 which indicated the length of kindergarten day programs were also derived from Question 4. The table indicated 68% of all kindergartens in the South were half day only, while 15% of all kindergartens in the Mid Atlantic were half day only. These two areas reflect the highest and lowest percentages of half day offerings

according to the responses returned. The figures were reversed for full day programs with 52% of the Mid Atlantic schools offering only full day programs and 16% of all Southern schools offering only the full day program. Fewer than one-third of all schools offered both full and half day choices. Again in the Mid Atlantic region 33% of all schools in the area offered a choice of full or half day programs, while only 16% of the schools in the South offered this option. By combining both half day day care and hourly day care options it can be seen that 44% of the Southern schools offered day care and 39% of the New England schools offered after school care. Of the remaining schools, fewer than 15% offered optional day care for kindergartens. responses and figures gave some indication of an attempt to meet parents' requests for longer hours of school care. an attempt to respond to the need for quality supervision, one school in a Mid Continent urban area described its dual program with a fully staffed day care program from 7:30 a.m. to 5:30 p.m. This was operated separately from its full day kindergarten. This option could be of interest to those schools wishing to preserve their academic program yet respond to the community's needs in day care.

### Question 5

This item requested information regarding total numbers of students a school could accommodate in kindergarten and first grade. Table 5 illustrates responses by range and mean for both grade levels in each geographic region.

Table 5

Number of Students Able to be Accommodated

		Kinder	garten	First Grade		
Region	<u>N</u>	Range	Mean	Range	Mean	
New England	18	5-45	24.7	5-45	26.3	
Mid Atlantic	46	14-57	25.5	16-63	29.1	
South	25	18-80	46.4	20-80	48.5	
Mid Continent	16	18-60	32.5	13-60	32.4	
Far West	14	12-80	37.8	14-60	35.2	
Total	119	5-8Ø	34.8	5-80	35.6	

Table 5 indicated the range of the numbers of students who could be accommodated in the independent schools surveyed. The totals ranged from 5 to 80 students in both kindergarten and first grade, with a mean of 34.8 students in kindergarten and 35.6 in first grades. The largest kindergartens and first grades were in the South with a reported mean of 46.4 for kindergarten and 48.5 for first grade. These figures were 33% and 36% greater than the national means for these two grades. The areas of least accommodation were New England with a mean of 24.7 for kindergarten and 26.3 for first grade and the Mid Atlantic region with a mean of 25.5 for kindergarten and 29.1 for first grade. The New England area could accommodate 29.1% fewer students in kindergarten and 26.2% fewer students in first grade than was indicated by the national means for

those two grade levels. The reasons for these differences were not indicated by the responses requested. The sizes of the kindergartens and first grades reported in Table 5 does not indicate the numbers of individual classrooms, nor the faculty/student ratios, is simply indicates the maximum size of kindergarten and first grade level programs.

### Question 6

This question indicated the total enrollment in kindergarten and first grade for the school year 1982-83 as reported by those schools surveyed. Two sets of data were generated by this question. Table 6 stated the actual enrollment rate and mean for kindergartens and first grades. An analysis of data in Tables 5 and 6 revealed that enrollments were not at capacity for many schools; Table 7 indicates the number of schools below capacity and the mean loss of students in those schools.

Table 6
Actual Enrollment 1982-83

		Kin	dergar	ten	Fir	st Grade	
Region	<u>N</u>	Range	Mean	Total	Range	Mean	Total
New England	18	3-45	23.1	417	5-45	23.1	417
Mid Atlantic	46	7-57	24.6	1137	10-62	26.7	1220
South	25	18-81	44.9	1116	19-82	46.1	1152
Mid Continent	16	13-6Ø	30.9	527	13-60	27.9	486
Far West	14	8-74	37.2	525	12-54	34.7	486
Total	119	3-81	33.5	3722	5-82	32.5	3761

A comparison of all schools in all regions indicated overall enrollment was not at capacity in any area (although individual schools in each area may have been oversubscribed). These school areas least affected by student loss were in the Far West region of Washington, Oregon, California and Arizona.

Table 7

Mean Loss of Kindergarten and First Grade Students

			dergart	en	First Grade			
Region	<u>N</u>	<u>N</u> of Schools	% of Total	Mean Loss	<u>N</u> of Schools	% of Total	Mean Loss	
New England	18	10	56%	2.9	lø	56%	4.2	
Mid Atlantic	46	25	54%	3.9	31	67%	3.6	
South	25	12	48%	3.4	13	52%	4.8	
Mid Continent	16	7	44%	4.1	9	56%	8.4	
Far West	14	3	21%	3.0	4	29%	1.3	
Total	119	47	48%	3.5	67	56%	4.5	

The figures in Table 7 indicate the region with the greatest mean loss of students was the Mid Continent region. This area included the industrial centers of the Great Lakes area and the figures may be assumed to be a reflection of the economic instability of the area. A total of 57 schools, or 48% of all schools, reported a mean loss of 3.46 students in the kindergarten classes. A total of 67 schools or 57% of all schools reported a mean loss of 4.46 students

at the first grade level. Forty-eight percent of all schools indicated the loss of at least one student in kindergarten and 56% of all first grades reflected the enrollment of at least one less student than could be accommodated during the 1982-83 school year. Thirteen schools or 11% of all schools were oversubscribed by from one to three students in both grades.

# Question 7

The responses to this question indicated that number of students scheduled for promotion from kindergarten to first grade in 1983-84. Table 8 described the number of schools promoting all kindergarten students to first grade; the number of schools and the mean number of students not promoted to first grade.

Table 8

Kindergarten Promotion and Retention for 1983-84

Region	Number of Schools W/ 100% Prom.	% W/ 100% Prom	Number of Schools W/ Retentions	% of Reten- tion	Mean Number of Students Retained
New England	9	5Ø%	9 .	50%	1.6
Mid Atlanti	c 26	57%	20	43%	2.5
South	4	16%	21	84%	3.1
Mid Continer	nt 10	63%	6	37%	3.2
Far West	9	64%	5	36%	1.8
Total	58	49%	61	51%	2.8

This question (7) was phrased to include all students eligible to reenroll, or, all students to whom contracts were offered for the school year 1983-84. In this way, the figures reflected those students actually retained in kindergarten, and did not reflect or indicate the number of students the schools did not ask to return. The Table 8 reveals that 61 schools did not promote a mean of 2.8 students per school. This reveals that 51% of all schools were not promoting all kindergartens students. Random telephone calls to schools indicated some reasons for retaining students were related to social and emotional immaturity; that teachers felt children needed an extra year of kindergarten or that children's skill levels were not up to the class level. These calls indicated kindergarten was considered by those contacted to be the appropriate placement for these children. Some cited developmental immaturity and the appropriateness of the kindergarten for building skills in the social, emotional and academic development of the children. All had had conferences with parents prior to this decision and for those children eligible to reenroll a concensus had been reached between school personnel and parents regarding kindergarten retention. The potential long term benefits to the child was considered the most important reason for retaining students.

### Question 8

This question requested the total numbers of applicants for kindergarten and first grade received between January 1 and September 1, 1982 for the 1982-83 school year. Table 9 reflects the range and mean of applications. The number of spaces available in kindergarten and first grade for all five geographical regions are listed in Table 5.

Table 9

Numbers of Applicants for Kindergarten and First Grade

Pania.			rgarten	First Grade		
Region	<u>N</u>	Range —	Mean 	Range	Mean	
New England	18	3- 75	30.6	3- 42	19.0	
Mid Atlantic	46	3-117	38.9	3- 78	20.3	
South	25	6-164	73.3	3-100	31.5	
Mid Continent	16	7-177	37.8	3- 67	19.0	
Far West	14	14-175	89.0	3- 81	32.1	

A comparison with Table 5 illustrates that the mean number of kindergarten applicants was greater than the mean number of spaces available. The mean number of first grade applicants was still greater than the number of spaces available because the first grades were filled from the school's kindergarten(s). A comparison with Table 8 indicates the substantially higher proportion of applicants for the very few spaces available at the first grade level for the subsequent (1983-84) school year. The information

requested on this question asked for a response which included all applicants and reflected no selection process. The largest numbers of applicants were in the Far West, the next greatest numbers in the South for both kindergarten and first grade; the least numbers occurred in the New England and Mid Continent areas.

### Question 9

This question was concerned with the numbers placed on waiting lists after the selection process. Table 10 reflects the responses to this question.

Table 10 Schools Reporting Waiting Lists

Kindergarten						Fir	st Grade	2
Region	N	ુક 	# Listed	M	<u>N</u>	96	Listed	M
New England	10	56%	4-20	12	9	50%	4-24	10.3
Mid Atlantic	26 <sup>a</sup>	57%	2-63	10.8	24	52%	1-24	6.9
South	21	89%	2-77	17	20	80%	2-31	13.6
Mid Continent	11	69%	1-54	18.8	9	56%	1-48	15.3
Far West	10	71%	5-45	15	9	64%	3-22	9.3

<sup>a</sup>Includes 2 schools fully enrolled for 1983-84 school year which were accepting no applicants at the time of the survey.

Table 10 indicates 66% of all kindergartens had established a waiting list for the school year 1983-84. A

waiting list for first grade had been established by 60% of the schools for the subsequent 1983-84 school year. This survey data was collected in early April, 1983 when many schools were involved in interviewing applicants for the coming school year. At that time, there were no standard reply dates for admissions and reenrollments in these independent schools and parents were able to make multiple applications to schools in confidence (NAIS, 1983). The sizes of the waiting lists for these schools might be accounted for by expectations of attrition over the summer. A waiting list does ensure that candidates would be available to fill unforeseen fall openings.

# Question 10

The responses to this question indicated the amount of the application fee. Results are shown in Table 11.

Table 11
Application Fee

Region	<u>N</u>	Amount	Mean
New England	16	\$10-30	\$22.7
Mid Atlantic	46	\$0-300 (4=0)	32.2
South	25	\$10-85	41.7
Mid Continent	16	\$0-285 (1=0)	68.0
Far West	14	\$25-50	32.3

Those schools with no application fee are entered as data and computed with other application fees. They are indicated by (=) in the Mid Continent and South areas. The Mid Continent and Mid Atlantic areas reported both the highest and lowest application fees. In some instances these fees were determined to discourage multiple applications and last minute attrition (NAIS 1983). It is interesting to note the Mid Continent areas had the highest mean fee, \$68 but also the highest mean loss of students in both kindergarten and first grade.

# Question 11

Question 11 asked if a separate testing fee is charged for tests given. Table 12 indicates the number of schools charging such fees and the range and mean amounts.

Table 12
Testing Fees

	Kindergarten								
Region	N	% of Total	Range	Mean	Range	Mean			
New England	-	_	_	_	-	-			
Mid Atlantic	12	26%	\$20-60	\$43	\$20-60	\$43			
South	7	28%	10-85	41.6	10-85	41.6			
Mid Continent	4	25%	15-35	26.2	20-35	27.6			
Far West	1	6%	50	5Ø	5Ø	5Ø			

Of the 119 schools surveyed 21.6% of the total reported a separate school testing fee. Thirteen additional schools in the Mid Atlantic region belong to a testing and result reporting admissions association. This association used Educational Records Bureau testing, which charged all applicants a \$60 fee for the 1982-83 school year. These amounts were not reported in the data in Table 12 because they were not fees paid to the individual schools like the other testing fees reported in Table 12.

### Question 12

This question was a seven part multiple choice question regarding procedures of importance in the admissions process. Respondents were asked to indicate which procedures were of interest to them in the admissions process and a ranking of items was determined from these responses.

Results are reported in Tables 13 through 19.

Table 13
"Yes" Responses to Parent Only Interviews

			Reg	ion		
Question 12a	<u>N</u>	NE	MA	so	MC	FW
Do you interview parents only	33	4	21	2	5	1
Reasons for applying	29	4	18	1	5	1
Representative of parents here	20	3	13	1	3	-
Appraisal of child's abilities	18	4	10	1	3	-
Education of parents	13	-	9	1	2	1
Able to afford school	lø	1	8	-	1	_
Reaction to child separation	lø	-	8	-	. 2	-

Of the 119 schools which responded, 28.9% of the schools interviewed parents only as indicated in Table 13. In order of importance 87.8% of those 33 responding schools were interested in the parent's reasons for applying to the school; 60.6% considered whether the parents seemed representative of the parents currently at the school; 54.5% were interested in the accuracy of the parent's appraisal of their own child's abilities; 39.3% expressed interest in the level of the parent's education and 30.3% indicated that parents' ability to pay the tuition was important. Ten or

30.3% also observed and attached importance to the parentchild reaction to separation. One school reported trying to ascertain whether the school's program and philosophy fit the parents' goals for the child.

Table 14
"Yes" Responses to Child Interview Without Parents

	Region						
Question 12b	N	NE	MA	so	MC	FW	
Child interviewed alone	92	14	39	16	11	12	
Behavior in interviews	91	14	38	16	11	12	
Follows directions	9ø	14	37	16	11	12	
Small muscle control	86	13	34	16	11	12	
Organized/ expressed thoughts	85	12	34	16	11	12	
Child reaction to separation	83	12	35	15	11	10	
Creativity	78	11	33	14	lø	10	
Prereading achievement	71	12	26	14	8	11	
Prearithmetic achievement	71	12	25	15	8	11	

Of the 119 schools responding, 77% of all schools interviewed children alone without parents present. Table 14 ranks the characteristics in order of importance to the interviewer. The child's behavior in the interview was

ranked most important in 98.9% of schools which interviewed children alone. Following directions was ranked second in importance by 97.8%; 93.4% felt small muscle control was next most important, with organization and expression of thoughts rated fourth according to 92% of those responding. The child's reaction to the parent separation received 90.2% of the total responses. Least important to 60% of the schools were prearithmetic and prereading achievement; other attributes noted but not included in the table were attention span, auditory and visual development, attitude, confidence, initiative, developmental maturity, flexibility, amount of television observed and language level. All schools ranked prereading and prearithmetic skills at fifth place or lower on this eight part question. This indicated that the behavioral qualities and developmental maturity of applicants assumed a greater importance in an interview than did skill or task mastery.

Table 15
"Yes" Responses to Joint Parent Child Interview

	Region						
Question 12c	<u>N</u>	NE	MA	so	MC	FW	
Parent/child interviews	41	6	19	7	6	3	
Relationship parent/child	37	5	18	5	6	3	
Behavior of child	36	4	18	5	6	3	
Parents cue child	34	4	15	6	6	3	
Level of child's speech	34	3	16	6	6	3	
Rely on parents for answers	33	4	14	6	6	3	

As shown in Table 15, 34.4% of all schools interviewed parents and child together. In order of importance, 90.2% of the responses indicated the relationship between parent and child was of primary importance to them; 87.8% of those responding attached importance to the behavior of the child in the presence of parents. Whether parents cued the child and the level of the child's speech ranked third according to 82.9% of those answering this item. The last rated item was whether children relied on parents to provide answers and this was noted by 80.4% of the schools. Other facets of the parent/child interview noted by schools were attention span, hyperactivity, independence from parents, and parents' goals for the child. Each of these attributes was noted by

only one school and these data are not reflected in Table 15.

Table 16
"Yes" Responses to Observation of Child with Peer Group

	Region						
Question 12d	<u>N</u>	NE	MA	so	MC	FW	
Child observed in peer group	86	16	31	18	12	9	
Participates in activity	84	15	31	17	12	8	
Interest in activity	83	15	31	17	12	8	
Motor control	78	14	29	17	10	8	
Fearful of group	76	14	28	16	11	7	
Dominates group	75	12	28	16	11	8	
Refuses to leave adults	74	13	26	17	12	6	

The child applicant was observed in a peer group in 74.7% of the 119 schools as shown in Table 16. The child's participation in group activities was of primary importance to 97.6% of admissions officers. In order of importance 96.5% observed the child's interest in activity in the peer group, while 90.6% observed the level of development of the child's motoric control. An indication of the child's fear of the group was of interest to 88.3% of schools, and the child's attempt to dominate the group was observed by 87.2%

the total responses. Whether the child refused to leave the adults was noted by 86% of those observing the child. Observation of the child in a peer group elicited the greatest number of additional items of all parts of the multipart question 12. Each additional observation was mentioned by only one school so the results were not included in the data analysis. The items added as points of observation were level of sharing, concentration, creativity, social and emotional maturity, originality, listening skills, peer interactions, group interaction, teacher child interaction, social adaptation, cooperation, and verbal interaction.

Table 17
"Yes" Responses to Testing Child

				Region	Region	
Question 12e	N	NE	MA	so	MC	FW
Do you test child	88	10	30	22	13	13
Follows directions	85	9	29	22	13	12
Ability level	79	6	28	21	12	12
Application of knowledge	78	. 7	25	22	12	12
Reaction to testing	78	7	28	19	12	12
Frustration level	75	7	26	20	12	lø
Logical answers	73	9	22	20	11	11
Scores	67	6	21	19	10	11

Table 17 records the responses to the question which asked if the school tested the child. A total of 75% of all 119 schools did test applicants. The most important function of the testing according to 96.5% of those responding positively was to determine whether the child followed directions. Second most important according to 89.7% was the ability level of the child as determined by testing; this was followed by 88.6% interest in the child's application of knowledge. The child's reaction to the test situation was important to 88.6% of those who tested, while the frustration level was of interest to 85.2%. Logical answers, whether correct or not, were cited by 82.9% of those responding, while the actual test scores were of interest to 76.1% of the admissions personnel. In the other or additional comments category, three schools stated developmental maturity was of importance to them, while one was concerned with whether or not the child asked questions, and one observed the child's level of fine motor control.

Table 18
"Yes" Responses to Personal Recommendations

	Region						
Question 12f	N	NE	MA	so	MC	FW	
Do you request recommendations	53	8	19	10	7	9	
For information about child	45	8	16	8	6	7	
Preference from school parents	32	4	14	8	4	2	
Information about parents	19	5	6	3	3	2	
Telephone contact	8	1	3	2	2	-	

Table 18 displays the responses to the question "Do you request personal recommendations?" Of the 119 schools surveyed, 45.2% did request personal recommendations for applicants. Of these, 84.9% of the 53 schools reporting requested information about the child, while 35.8% requested information about the parents. Preference was given to recommendations from current or past school parents by 60.3% of the schools. Contact by telephone was made to only 15% of the personal references. Two schools additionally requested information and recommendations from the previous preschool, and one contacted these references only as a courtesy to parents who were applying to the school.

Table 19
"Yes" Responses to Information Requests from Prior Schools

	Region						
Question 12g	<u>N</u>	NE	MA	so	MC	FW	
Contact previous school	99	17	43	15	12	12	
About behavior	97	16	42	15	12	12	
About ability level	95	16	41	15	12	11	
Written contact	91	16	41	12	11	11	
Relations with family	66	11	31	7	11	6	
Academic level in school	55	7	25	1ø	6	7	
Telephone contact	36	3	17	7	5	4	

Table 19 indicated the importance that admissions persons attach to information from previous schools. A total of 99 of 119 schools, or 85.3% of all schools made contact with applicant's previous school. Of these, 97.9% were concerned with the behavior of the child in the previous school situation, while 95.9% expressed interest in the ability level of the child. Written contact was made by 91.9% of responding and telephone contact was made by 36.3% of those responding. This duplication of effort reflects that some schools made both written and telephone contact; however, written contact was preferred by a substantial majority. The previous school's relationship with the

family was of interest to 66.6% of the schools and 55.5% were concerned with the academic level of the previous school compared to their own school. One additional citation not listed in Table 19 was to see if the family left the previous school while owing money. Two other schools stated they felt preschool contact and evaluations were important in their admissions procedures. This data is not reported in the table.

#### Question 13

This question requests that qualities sought in applicants be ranked in order from one to ten, with one being most important and ten being least important. This question was submitted to all 119 independent schools in the sample and it was also submitted to seventeen professors at schools of education in United States universities. The responses from the independent schools totalled 112 or 94.1% of the total schools; the responses from university personnel totalled 11 of 17 or 64.7%. The results are shown in Table 20.

Table 20 Ranking of Qualities Sought in Applicants

	All			Regi	on	-			
Qualities	(N=112)	NE	MA	so	MC	FW	Univ.		
Prereading achievement	7	9	5	6	6	1	1		
Prearithmetic achievement	9	10	8	9	7	6	8		
Parent child relationships	lø	4	10	10	9	10	9		
Peer relationships	2	2	2	7	. 2	3	5		
Organization/ express of thought	:s 3	8	3	2	5	2	3		
Vocabulary	4	5	4	3	10	7	2		
Maturity of speech	6	7	6	5	8	5	4.		
Creativity	8	6	9	8	4	9	10		
Temperament	5	3	7	4	3	8	7		
Behavior	1	1	1	1	1	4	6		

In all areas except the Far West, the quality ranked highest by admissions officers in applicants is <u>behavior</u>. This is ranked sixth by university professors. Paige and Keith (1982) in response to the Coleman Report (Coleman, Hoffer & Kilgore, 1981) indicated the private schools accomplished more because they selected students who were not discipline problems. The kindergarten research results indicated such a hypothesis was valid for this sample and

that student selection was heavily weighted in favor of those who do not exhibit behavior problems. First ranked by university professors is achievement in prereading (also ranked first in the West). This was ranked ninth by all schools. A further comparison with Question 12 revealed 98% of 99 schools which requested information from previous schools asked for a report on the behavior of the child; 99% of all responses to Question 12b were concerned with the behavior of the child in the interview.

The second highest school ranked quality (except for the South, ranked seven, and the Far West, ranked third) was peer relationships. This was ranked fifth by university professors, who rated vocabulary as the second most important quality in a kindergarten applicant. Seventy five percent of all independent schools observed an applicant in a peer group according to Question 12d (Table 16), and of this group, 96% noted whether the applicant was interested in, and participated in the peer group activities.

If one were to categorize the two qualities ranked highest by both school personnel and university personnel it is obvious that independent schools persons evaluated candidates in terms of social and emotional development and that university personnel rated cognitive skills levels higher than did educators in the field. Both groups rated organization and expression of thoughts third. This is the only instance of exact agreement.

The Mid Atlantic, South and Far West all ranked parent/child relationships last in importance; the Mid Continent and university professors ranked this quality ninth or next to last, and the New England area ranked it fourth. Question 12c (Table 15) revealed more information about this quality; only 32% of all schools noted this relationship in interviews. Parent child relationship, creativity and prearithmetic achievement were all three rated least important to both independent school and university personnel, although the actual rankings of 8, 9, and 10 were not identical for both groups.

#### Question 14

This question asked if an IQ score was used when considering applicants for admission, and if so, what the minimum acceptable score was. Of the 119 schools queried, 24.3% did consider an IQ score and the mean minimum score for all five regions was 112. The New England region had no schools reporting the use of IQ scores. The Mid Atlantic area reported eight or 17.3% of the schools used IQ scores routinely, with one school utilizing this kind of testing only occasionally. Twelve schools in the South used IQ scores as a consideration for admission. This use by 48% of the regional group of schools was the highest use of the IQ score reported in this research. Five schools in the Mid Continent area or 31.2% and three schools or 21.4% in the Far West routinely included IQ scores in their evaluations

of candidates. The range of scores acceptable for all schools was between 100 and 125 or more, with the mean calculated for all 29 schools at 112.

Question 15. This question asked if parents were present during the observation, interview or testing of the child. A total of eight schools indicated this would be acceptable in all three areas of evaluation if necessary, but their preference was for parents to retire from the situation if possible. Table 21 reflected the answers given to this question by schools which usually included parents.

Table 21
Parents Presence During Admissions Procedures

				Region		
Admissions Procedures	<u>N</u>	NE	MA	so	MC	FW
Observation of child	9	1	4	1	2	1
Interview of child	25	3	. 11	5	3	3
Testing of child	6	1	1	2	1	. 1

Table 21 indicated 9 or 7.8% of all schools routinely included parents in the observation of the child for admissions purposes, while 21.7% of all schools allowed parents to participate in the interview process. Six or 5.2% of all schools did not exclude parents from the testing portion of the school admissions process. These figures

indicated that while parents were not discouraged from being present at the admissions evaluation, the numbers who were routinely included were small enough to indicate the presence of parents was not the norm for a significant majority of the independent schools surveyed.

# Question 16

This question requested the years of experience of the admissions personnel involved in the admissions process.

The responses are presented in Table 22.

Table 22
Mean Years of Admissions Experience

				Region							
Position	<u>N</u>	Range	М	NE	MA	so	MC	FW			
Director	93	1-35	9.2	12.3	9.6	9.7	7.9	8.5			
Admissions	85	1-33	8.8	4.6	8.7	7.6	10.8	9.5			
Teachers	202	1-45	8.3	9.5	8.4	7.9	8.2	6.9			
Other <sup>a</sup>	10	1-25	9.2	_	14.5	Ø	8.2	-			

<sup>&</sup>lt;sup>a</sup>Includes 4 Education Specialists, 2 Division Directors, 2 Admission Secretaries.

Table 22 indicates that 93 School Directors and 10 others (Education Specialists) have been involved in admissions for a mean of 9.2 years. This was the highest mean experience level for combined areas. In the five regions the most experienced School Directors were in New

England, which reported a mean of 12.3 years in admissions experience; the least experienced School Directors were in the Mid Continent region and their mean reflected 7.9 years experience in admissions. The Mid Continent area Admissions Directors reported the highest mean of 10.8 years experience, while the New England area reported the least experience for Admissions Directors, with a mean of 4.6 years. These two areas reflected the highest and lowest means for school directors and admissions directors. The total mean years of experience for 85 Admissions Directors was 8.8 years. There were 202 teachers involved in admissions in the 119 schools surveyed. Their mean number of years of experience was 8.3, with the most experienced (M=9.5) in the New England area and the least experienced (M= 6.9) in the Far West. The most experienced personnel involved in admissions were categorized as other. These four Education Specialists in the Mid Atlantic area had a mean of 14.5 years of experience in admissions.

#### Question 17

This question requested information about the type of training acquired by admissions personnel. Table 23 presents this data.

Table 23

Numbers of Participants and Types of Training

munoa of	Region										
Types of Training	<u>N</u>	8	NE	MA	so	MC	FW				
Academic courses	76	63.8	9	3Ø	16	12	9				
Workshops/ NAIS	58	48.7	14	17	8	11	8				
Workshops/ other <sup>a</sup>	56	47.0	4	24	13	6	9				
Adminis- tration	71	59.6	13	27	15	12	4				
Devised own <sup>b</sup>	56	47.0	5	25	12	7	7				

<sup>a</sup>Other workshops included 17 Gesell Institute, 27 state Independent School Association, 6 educational, 6 reading workshops.

bOwn training was reported as teaching experience, observing other admissions personnel, reading, assistance from other schools.

The majority, 63.8% of admissions persons have been students in academic courses such as child development, testing and measurement and child psychology. The next most prevalent category of training was the training the school administration gives its personnel. A total of 59.6% of those responding received training this way. NAIS workshops were attended by 48% of admissions persons. Forty seven

percent attended other types of workshops and the same number, 47% devised their own training. Many persons participated in more than one type of training, so the percentages do not total 100%. No school reported not participating in some form of training.

#### Question 18

This question asked for the numbers of persons who had attended two or more admissions related presentations since January 1, 1981. The data are presented in Table 24.

Table 24

Attendance at Two or More Admissions Presentations

Since January 1, 1981

Numbers by Region

Types of		Region									
Training	<u>N</u>	96	NE	MA	so	MC	FW				
School Director	55	59.1	8	15	11	11	10				
Admissions	68	80.0	15	26	12	9	6				
Teachers	46	22.8	6	19	8	9	8				
Other <sup>a</sup>	6	60.0	1	1	2	2	-				

<sup>&</sup>lt;sup>a</sup>Language consultants, reading teachers, learning specialists.

Table 24 results reflected attendance at admissions inservice sessions within the 28 month period prior to the

research study. Between January 1, 1981 and April, 1983, 80% of the admissions personnel attended two or more admissions presentations, and 59.1% of the school directors had also attended two or more presentations. Teachers responses indicated fewer numbers had attended inservice presentation. Of the 202 teachers involved in admissions (Table 22) 22.8% of the total had received inservice training during this 28 month period, while 60% of others indicated their attendance.

### Question 19

Question 19 indicates the amount of time spent with applicants in an admissions process. Information was requested as to the number of minutes spent by school directors, admissions personnel, teachers and others in observing, interviewing and testing kindergarten applicants. Table 25 reflects these responses in mean number of minutes.

Table 25
Number of Minutes Spent with Kindergarten Applicants

	Observ	ation	Inter	view	Testing			
Title	Range	Mean	Range	Mean	Range	Mean		
School								
Director	5-150	30.24	5- 90	23.0	10- 90	30.00		
Admissions Directors	5-180	31.22	5- 90	26.5	10- 60	30.36		
Classroom Teachers	5-480	65.00	10-180	40.0	10-150	42.90		
Other <sup>a</sup>	15-60	28.00	20- 40	30.0	15- 90	33.00		

<sup>&</sup>lt;sup>a</sup>Psychologists, educational specialists, division heads.

Table 25 indicates directors and admissions persons each spent 30 to 31 minutes observing and testing applicants and 23 and 26 minutes in interviews. Teachers spent 65 minutes observing, 43 minutes testing and 40 minutes interviewing applicants. The greater mean amounts of time spent by teachers may reflect the value of their evaluations to the schools, particularly since teachers were included in 78% of the admissions decisions as reported in Table 26.

#### Question 20

This question requested the title(s) of person(s) who made the decision to admit candidates to a school after the admissions procedures had been completed. Data was recorded for all combinations of personnel according to geographical

area. Responses were received for 118 of 119 schools surveyed. One school in New England did not respond and percentages were calculated on 118 of the responses. Data are presented in Table 26.

Table 26
Responsibility for Admissions Decisions

		·.		Numbers	by	Region	
Personnel	<u>N</u>	8	NE	MA	so	MC	FW
Director only	9	7.6	1	2	4	1	1
Admissions only	2	1.6			1		1
Teachers only	2	1.6		1			1
Director & admissions	15	12.7		10	3	2	
Director & teachers	25	21.7	1	9	6	1	8
Admissions & teachers	5	4.2	3	2			
Director, admissions, teachers	60	50.8	12	22	11	12	3
Total <u>N</u> Schools	118	99.6%	17	46	25	16	14

The majority of schools, 50.8% utilized a committee composed of directors, admissions persons and teachers to make decisions about candidates. This was the norm in all areas except the Far West where 57% of these decisions are

made by directors and teachers in combination. The director teacher combination was utilized by 21.7% of all schools, with the director admissions person combination employed by 12.7% of the total schools. In 7.6% of all schools the director had sole responsibility for the admissions decision, and in 1.6% of the schools either the admissions person or the teachers made the decision to admit applicants. Responses indicated teachers were involved in admissions decisions in 92 schools, reflecting 78% of all admissions decisions made in the 118 independent schools which responded to this question.

### Question 21

This question requested the names of published tests used in evaluating the abilities of kindergarten applicants to independent schools. The 112 respondents to this question reported 35 different tests being used as part of the admissions evaluation. Tests used by two or more schools are reported in Table 27. The remaining 22 tests were each cited one time by a single school and were included in the category "other" tests. While some schools reported using parts of tests and other reported occasional use of published tests, neither of these categories was included nor analyzed in Table 27. Subtests or portions of standardized tests should not be used according to Anastasi (1983) and Wechsler (1967, 1974). More accurate information will be acquired by using a complete, more appropriate test.

Table 27
Number of Schools and Published Tests Used

		% of		Re	gion		
Test Name	<u>N</u>	Schools	NE	MA	so	MC	FW
Draw-A-Person	35	31	10	12	7	3	4
WPPSI/WISC-R	29	26	-	15	9	2	3
Gesell	20	18	2	9	5	3	1
Metropolitan Readiness	13	12	1	3	6	3	_
Stanford Binet (Form L-M)	10	9	2	4	2	1	1
Slosson Intelligence	9	8	-	3	3	3	_
Missouri KIDS	6	5	-	4	-	2	1
Beery V.M.I.	5	4		-	1	3	1
Boehm	5	4	-	-	4	. 1	-
Brigance	3	3	2	1	_	-	_
McCarthy Scales	3	3	-	-	1	2	-
SEARCH	2	2	-	2	-	_	-
Other	21	-	1	7	8	1	4
$\underline{\mathtt{N}}$ Tests Used	169		19	61	50	25	15
N Schools	92		13	34	22	13	10

The Draw-A-Person test (Goodenough & Harris, 1963) is used by 35 of 92 schools, or 31% of those schools. It was most used in the New England, Mid Continent and Far West regions, but was second in use in the Mid Atlantic and

The next most utilized measures were the WPPSI South. (Wechsler, 1967) and WISC-R (Wechsler, 1974). These were used by 26% of schools in all areas except the Mid Atlantic and South where these tests were the most often selected for The Gesell tests (Ilg, Ames, Haines & Gillespie, 1980) were third in use, except in the South where they were fourth. Responses indicated 18% of the 92 schools selected this test. The total of 92 schools used 169 published tests, a mean of 1.89 tests for each school. The Southern area utilized the greatest numbers of published tests: 22 schools reported using 50 tests. Most revealing about Table 27 was the large number of schools using the Wechsler measures and the Gesell tests as these are individual tests requiring trained examiners. This use would indicate a training commitment on the part of the school and staff, or extensive use of trained examiners as support personnel in the admissions process. Of the 119 schools surveyed, 23% did not use published tests in the evaluation of kindergarten applicants.

#### Questions 22

This question asked schools to indicate whether they had designed their own tests. If they had designed tests for use in admissions they were asked to submit a copy to be anonymously included in Appendix E. These fascimiles will be available to schools wishing to adapt them to their own use. Sixty-seven or 56% of the 119 schools responded that

they had designed their own tests, and 19 or 27% gave permission to reproduce their self designed measures. Thirteen schools, 19% of the total of 67 schools, in New England designed their own measures, 24 or 36% of those which responded from the Mid Atlantic region used self designed tests. This one area reported the greatest use of school designed tests. The South reported 10 or 15% of those replying employed self designed tests, and the Mid Continent area indicated 12 or 18% of respondents had designed tests for use in admission. The Far West reported the fewest number of school designed tests: only 8 or 12% of the schools reported they had designed tests. An evaluation of individual self designed tests from areas throughout the United States revealed a uniformity in items, despite differences in length of tests. Typically these tests included requests to name colors, write name(s), count aloud, count objects, copy shapes, draw a person or self, follow simple directions, name shapes, numbers, letters, identify consonant and short vowel sounds, discriminate between sizes and shapes, complete a design according to a model, discriminate between simple sounds, build block designs to a pattern, repeat digits, discuss family, pictures and to arrange pictures in sequence among other tasks.

These types of criterion referenced tests seek to test the child's basic skills, without comparing his performance to a normed group. Construction of such tests involves the identification of tasks which are determined to be important. The tasks then are broken down into small units which can be identified in terms of the individual's performance. These are phrased as instructional objectives, and items are then written or composed to sample the objectives. Analyzing these test items will usually indicate to those involved in test design how difficult the items are, and how well the item discriminates between high and low ranking students (Anastasi, 1982). Katz (1961) described a simplified item analysis which teachers can complete in a short time. Anastasi (1982) stated:

The very choice of content or skills to be measured is influenced by the examiner's knowledge of what can be expected from human organisms at a particular developmental or instructional stage. Such a choice presupposes information about what other persons have done in similar situations (p. 98).

Tables 22 and 23 reflect responses which indicated the years of experience (M 8.3-9.2 years) and the levels of training of admissions persons. The uniformity of the schools' self designed tests revealed a similarity of opinion about appropriate cognitive skills levels for kindergarten admissions. which may reflect a similarity of experiences of admissions persons.

### Question 23

This question asked respondents to evaluate their level

of satisfaction with their current admissions practices and policies. The four response choices offered were (a) our current policies/practices fully meet our objectives, (b) our current policies/practices are satisfactory but could be improved, (c) we are not satisfied with current policies/practices, (d) we have no standard procedures. Of the 119 schools responding, 54 or 45% were fully satisfied and 65 or 55% were satisfied but felt improvement was desirable. No other categories were selected by any schools. Table 28 shows the responses by area.

Table 28

Level of Satisfaction with Procedures by Region

		Region										
Satisfaction	<u>N</u>	. %	ΝE	ob	MA	%	so	8	MC	%	FW	<b>ે</b>
Satisfied	54	45	6	33	21	46	12	48	9	56	8	57
Could be improved	65	55	12	67	25	54	13	52	7	44	6	43

Table 28 indicates the least satisfied area was the New England area where 12 or 67% indicated they could be improved. In the Mid Atlantic region, 25 or 54% felt they could be improved, and in the South 13 or 52% felt they could be improved. In the Mid Continent, 9 or 56% and in the Far West 8 or 57% were fully satisfied. Schools in these two areas responded they were more satisfied than the other three areas surveyed.

### Question 24

Question 24 asked respondents to indicate the kinds of inservice training they would like to have to help them in admissions evaluations. A three item multiple choice and fourth open ended item were provided for respondents. Table 29 illustrates responses by region.

Table 29
Admissions Evaluation Aids

Numbers by Region											
<u>N</u>	olo	NE	%	MA	%	so	%	MC	%	FW	%
41	26	4	3	21	13	6	4	6	4	4	3
6Ø	38	10	6	22	14	9	6	lø	6	9	6
43	27	6	4	13	8	9	6	8	5	7	4
16	lø	3	2	2	1	3	2	4	3	4	3
	41 60 43	41 26 60 38 43 27	41 26 4 60 38 10 43 27 6	41 26 4 3 60 38 10 6 43 27 6 4	NE         %         MA           41         26         4         3         21           60         38         10         6         22           43         27         6         4         13	NE         %         MA         %           41         26         4         3         21         13           60         38         10         6         22         14           43         27         6         4         13         8	N         %         NE         %         MA         %         SO           41         26         4         3         21         13         6           60         38         10         6         22         14         9           43         27         6         4         13         8         9	N         %         NE         %         MA         %         SO         %           41         26         4         3         21         13         6         4           60         38         10         6         22         14         9         6           43         27         6         4         13         8         9         6	N         %         NE         %         MA         %         SO         %         MC           41         26         4         3         21         13         6         4         6           60         38         10         6         22         14         9         6         10           43         27         6         4         13         8         9         6         8	N         %         NE         %         MA         %         SO         %         MC         %           41         26         4         3         21         13         6         4         6         4           60         38         10         6         22         14         9         6         10         6           43         27         6         4         13         8         9         6         8         5	N % NE % MA % SO % MC % FW  41 26 4 3 21 13 6 4 6 4 4  60 38 10 6 22 14 9 6 10 6 9  43 27 6 4 13 8 9 6 8 5 7

amore time with applicants, developmental evaluation lists, short oral test, developmental checklist, learning disability screen, regular admissions meetings, 3 to 4 year old motor skills test.

Of the three types of admissions aids proposed, publications were desired by 38% of the respondents, lists of available tests were important to 27% of the respondents, and more workshops were selected by 26% of the schools responding. The higher percentages of interest in written materials may indicate a desire to have materials

available in a format which is convenient to review. This research did not ascertain how useful workshops were to respondents; the lower rate of interest as shown in Table 29 may indicate that while workshops were generally attended (Table 23), perhaps specific concerns were not being addressed; additionally, attendance at workshops requires a commitment which some may be unable to assume. This statistical analysis did not reveal the rationale underlying responses and the above reflect surmisal on the part of the researcher.

#### Question 25

This open ended question requested information about the specific changes schools would like to make to improve the admissions process. Thirty-eight, 32% of the 119 schools surveyed desired changes in procedures. These responses ranged from nine or 24% who desired more time to one, 3%, who wanted the administration to remove themselves from the process, and one, 3%, who wanted to improve its own preschool. Seven or 18% wanted an observational checklist, three or 8% were in need of a parent observation checklist. Six or 16% wished to add or change their tests and testing procedures and one, 3%, was interested in a regional or local common acceptance date. One, 3%, was changing to Gesell testing (Ilg, et al), one, 3%, thought a one day regional meeting would be helpful. One school, 3%, wanted more scholarship money to encourage more minority

applicants. One, 3%, wanted monetary compensation for Saturday work and one, 3%, wanted the school tours limited in time and wanted children tested in larger groups. If one were to combine these desired changes into broad categories, the profile of changes would indicate that (a) 15 schools or 40% indicated they needed more time than available in order to process candidates more objectively and,(b) 10 schools or 26% wanted an observational checklist of some type, (c) 7 or 18% anticipated or desired some kind of change in the testing situation. Two, 5% expressed an interest in more communication among schools in their locales, and four or 10% of those responding appeared to have concerns about the level of support from their own administration.

## Examination of the Hypotheses

The design of this study produced six objectives and 11 hypotheses regarding procedures, personnel, satisfaction levels, retention rates and selection ratios related to independent school kindergarten admissions procedures. Ten of the 11 hypotheses and all explorations of the relationships of other variables were tested by the chisquare procedure at the .05 level of significance. An hypothesis which compared the rankings of two independent groups was analyzed by the Friedman nonparametric test also at the .05 level of significance (Siegel, 1956). The number of subjects was 119.

### Hypothesis 1.1

There will be no significant difference in student reenrollment between schools which have specific procedures for evaluating candidates and schools which do not have specific procedures for evaluating candidates.

The total number of subjects responding to this item was 119. All 119 schools reported specific procedures, therefore the null hypothesis was accepted.

### Hypothesis 1.2

There will no significant difference in satisfaction levels of the admissions process between schools which have specific procedures for evaluation candidates and schools which do not have specific procedures for evaluating candidates.

The total number of subjects responding to this item was 119. All 119 schools reported specific procedures; the null hypothesis was accepted.

## Hypothesis 1.3

There will no significant difference in the specificity of procedures of evaluation between schools which have a large selection pool and schools which have a small selection pool of applicants.

The total number of subjects responding to this item was 119. All 119 schools reported specific procedures.

The null hypothesis of no difference for Hypothesis

1.3 was accepted for this hypothesis.

### Hypothesis 2.1

There will be no significant difference in student reenrollment between schools with trained personnel and schools with untrained personnel. Training in this research was defined at ten hours of inservice which could be met by three units individually or in combination such as course work, workshops, or school inservice. The chi-square of 1.09 was not significant for 4 df at p. < .05; therefore the null hypothesis of no difference was retained (Appendix F).

### Hypothesis 2.2

There will no significant difference in student reenrollment between schools with experienced personnel and schools with inexperienced personnel. Experience in this research was defined as more than two years in an admissions capacity. The calculated chi-square of 7.26 was not significant for 4 df at p. < .05; therefore the null hypothesis of no difference was retained (Appendix F).

### Hypothesis 2.3

There will be no significant difference in satisfaction with procedures between schools with trained personnel and schools with untrained personnel. A choice of four levels of satisfaction was provided on Question 23 of the questionnaire: (a) our current policies/practices fully meet our objectives, (b) our current policies/practices are satisfactory but could be improved, (c) we are not satisfied with our current policies/practices, (d) we have no standard

procedures. All schools responding ( $\underline{N}$ =119) indicated choice (a) and (b) only. These two items are designated in the tables involving this variable as: (a) satisfied and (b) needs improvement.

The calculated chi-square of .57 was not significant for 2 df at  $\underline{p}$ . < .05; therefore the null hypothesis of no difference was accepted (Appendix F).

### Hypothesis 2.4

There will be no significant difference in satisfaction with procedures between schools with experienced personnel and schools with inexperienced personnel. Experience in this research is defined as more than two years in an admissions capacity.

The calculated chi-square of 3.35 was not significant for 2 df at p. < .05; therefore the null hypothesis of no difference was accepted (Appendix F).

## Hypothesis 2.5

There will be no significant difference in the amount of training of personnel between schools with a higher selection ratio and schools with a lower selection ratio.

The calculated chi-square of 1.95 was not significant for 4 df at  $\underline{p}$ . < .05; therefore the null hypothesis of no difference was accepted (Appendix F).

## Hypothesis 2.6

There will be no significant difference in years of

experience of admissions personnel between schools with a high selection ratio and schools with a low selection ratio. The observations are reported in Table 30.

Table 30
Years of Experience by Selection Ratio

Selection Ratio	6 or less	7-10	10+	Total
1-1.50	33	15	3	51
1.51-2.50	11	12	8	31
2.51+	19	10	8	37
Totals	63	37	19	119
$\mathcal{L}^2 = (4, \underline{N}=119) = 9$	.83, <u>p</u> . < .05			

The chi-square value of 9.83 exceeds the table value of 9.48 for significance at the .05 level. This hypothesis sought to explore relationships between the experience levels of admissions personnel and the selection ratio of applicants at their school. The expected values were assumed to be equally distributed among all cells. The analysis indicated that the relationship was unequal and therefore not the result of chance. Data analysis revealed that schools with the least experienced admissions personnel also had the lowest student selection ratios. The results in Table 30, and the study did not indicate the factors which affected the responses. This statistical significance could have been a result of recent administrative changes in the

schools which might have had a impact on both admissions officers' tenure and the selection ratio. Additionally, less experienced personnel might be more selective in the evaluation of applicants than admissions personnel with more experience. Some schools reported they did not maintain waiting lists, they would have no need for a large selection pool. This research study did not research rationale underlying responses and the previous comments are surmised by the researcher. Hypothesis 2.6 which stated that schools with a higher selection ratio will not have more experienced personnel than schools with a lower selection ratio, is, therefore, rejected as false.

### Hypothesis 3

There will be no significant differences between admissions persons rankings of important qualities for applicants to independent schools and those qualities perceived as important by child development and education specialists in universities throughout the United States. The statistical testing of this hypothesis utilized the nonparametric Friedman test. The Friedman test examines whether three or more samples of data come from the same population. The data in this hypothesis was collected on seven sets of subjects (five regions, one regions total, one university professors), and each set was ranked. A calculated value was obtained and compared to the critical value table which gave the exact probability

associated with the calculated value (Huck, Cormeir & Bounds, 1974). These probabilities were then compared to the .05 level of significance and established for this research. Table 31 presents the results of this analysis of data. This table contains the rank orders for qualities determined to be important in the evaluation of candidates for admission to independent schools.

Table 31
Rankings of Qualities Sought in Applicants

Quest	ion 12	Items	All	NE	MA	so	MC	FW	Univ.
a. Pro	ereadin hieveme	g nt	7	9	5	6	6	1	1
	earithm hieveme		9	10	8	9	7	6	8
	rent/ch lations		10	4	1ø	lø	9	10	9
d. Pe	er lations	hips	2	2	2	7	2	3	5
ex	ganizat pressio oughts		3	8	3	2	5	2	3
f. Vo	cabular	У	4	5	4	3	10	7	2
	turity eech	of	6	7	6	5	8	5	4
h. Cr	eativit	Y	8	6	9	8	4	9	10
i. Te	mperame	nt	5	3	7	4	3	8	7
j. Be	havior		1	1	1	1	1	4	6

The calculated critical value of the ranks was 33.11. The table critical value at the .05 level of significance with 9 df was 16.92. The null hypothesis of random assignment was rejected; there was a significant difference in rankings by different groups When the categories of university professors and all were not included in the calculations, a calculated critical value of 23.14 was obtained at the .05 level of significance. The table value reported was 16.92 for 9 df. The null of no differences in rankings was rejected. There was a significant difference between rankings of qualities deemed important in independent school applicants. Question 13, Table 20, discusses the differences in the independent data ratings.

Prereading achievement. The school sample surveyed in this research study were designated by Porter Sargent (1982) as prepreparatory. The university professors were asked to rank the ten qualities perceived as important to a reading based kindergarten program. The schools group and the university professors were both asked to evaluate qualities of importance in applicants to academically oriented kindergartens. Of the five school groups surveyed only one was in agreement (Far West, N=14) with university professors that prereading achievement was of primary importance in a prepreparatory kindergarten. The other four school groups unanimously selected behavior as the most important criterion for admission to their academically

oriented kindergartens. The rankings on prereading achievement by these four school regions were clustered around five, six and seven on the scale of ten.

<u>Prearithmetic achievement</u>. All school groups, and the university professors rank this quality relative low, 7-10.

Parent child relationships. All groups ranked this quality as ninth or tenth, except for the New England area which rated it fourth on a ten rank scale.

Peer relationships. This quality was ranked second or third by all schools except the South where it ranked seventh in importance. University professors placed this in the middle rank, at five.

Organization and expression of thoughts. Rankings here were two or three except for the New England area which rated this quality eighth, and the Mid Continent area which rated it fifth.

Vocabulary. Vocabulary was rated third to seventh by all school areas except the Mid Continent where it ranked last on a ten rank scale. University professors ranked this second in importance to prereading achievement in the evaluation of qualities desirable in kindergarten applicants.

Maturity of speech. Rankings here fell between four and eight for all groups indicating less perceived

importance to this aspect of child development.

Creativity. The creative abilities of the kindergarten applicant ranked eight, ninth and tenth for all areas except the Mid Continent which placed creativity fourth and the New England area which ranked this quality sixth.

Temperament. University professors and two school areas, Mid Atlantic and Far West, ranked this quality seventh or eighth, however the New England, South and Mid Continent area ranked this third or fourth. The overall ranking for all schools was fifth.

Behavior. This ranking, the most unanimous of all rankings is discussed in <a href="Prereading achievement">Prereading achievement</a>. All schools but the Far West ranked this first in importance.

The rank ordering of qualities sought in applicants revealed similarities, or general agreement between most areas, with the exceptions previously discussed. The major significant differences were in the evaluation of prereading achievement, where ranked scores for all groups ranged between one and nine, and in peer relationships, which the South ranked as seventh and all other groups ranked as second or third. The Mid Continent area of schools ranked vocabulary last with the other areas rankings between three and seven on this quality. The Mid Continent schools also rated creativity at fourth, with other schools ranking it at eighth to tenth.

The most pronounced differences in total rankings were between the New England area compared to both the Far West and the university professors' rankings. Table 37 indicates the rankings for these three groups in order to indicate differences:

Table 32
Rankings of Qualities Sought in Applicants

Que	stion 12 Items	NE	FW	University
a.	Prereading achievement	9	1	1
b.	Prearithmetic achievement	10	6	8
c.	Parent/child relationships	4	10	9
đ.	Peer relationships	2	3	5
e.	Organization/expression of thoughts	8	2	3
f.	Vocabulary	5	7	2
g.	Maturity of speech	7	5	4
h.	Creativity	6	9	10
i.	Temperament	3	8	7
j.	Behavior	1	4	6

An examination of this table indicates Items a, b, e, f, and g could be classified as being in the cognitive domain, and Items c, d, h, i, and j classified within the affective domain (Bloom, 1956; Kratwhol, Bloom & Masia, 1967). If these items were reorganized according to domains it could be seen the qualities most valued in the New

England schools were affective, and the qualities most highly ranked in the Far West area were cognitive. Of all areas, the Far West was in closer agreement to the university professors rankings, than any other school region.

### Hypothesis 4

There will be no significant difference between the reenrollment rate of students and the school's level of satisfaction with its admissions procedures.

The calculated value of .03 was not significant for 2 df at  $\underline{p}$ . < .05; therefore the null hypothesis of no difference was accepted (Appendix F).

A fifth objective of this research was to measure the significance of differences between responses on other selected variables which were measured in this research. The chi-square nonparametric statistical analysis procedure was used to analyze these data at the .05 level of significance. The variables tested were the reenrollment rate, the selection ratio and the level of satisfaction by the directors', admissions officers', teachers', and others' time spent in observation, interview, and testing of kindergarten applicants. Forty-five tables of data were computed; only three indicated differences which were significant and not expected. Data for and discussion of these analyses are presented in Tables 33, 34 and 35.

Table 33
Minutes of Teacher Interviews by Level of Satisfaction

	-30	3Ø+	Totals
Satisfied	14	8	22
Needs improvement	20	2	22
Totals	34	10	44
$\chi^2 = (1, \underline{N}=44) = 4.6$	6, <u>p</u> . < .05		

The chi-squarevalue of 4.66 exceeds the table value of 3.84 for significance at the .05 level. This objective sought to identify whether the amount of teacher interview time had any significant impact on the school's level of satisfaction with its admission procedures. The variables of (a) amount of time spent with applicants and (b) satisfaction level of the school with its admissions procedures was explored for directors, admissions officers, and teachers in observations, interviews and testing of applicants. The statistical analysis revealed there was a significant relationship between the satisfaction level and teacher interviews as indicated in Table 33. Eight satisfied schools or 18% had teachers who spent more than 30 minutes in interviewing, two or 5% of schools needing improvement spent more than 30 minutes in interviewing. Fourteen of the schools, 32%, had teachers who spent fewer than 30 minutes in interviewing applicants, yet were satisfied with procedures. Of the teachers conducting

interviews, 20 or 45% spent fewer than 30 minutes and the schools felt they needed improvement in their admissions procedures. This data analysis did not indicate causal relationships, but did indicate that 34 of the 44 schools, or 77% of the schools had teachers who spent less than 30 minutes in interviewing, and of these 34 schools, 20 or 45% were dissatisfied. Increased time spent by teachers in interviewing applicants revealed only eight or 18% were satisfied and also spent more time. Methods of interview, interviewing techniques and personnel involved could have made these differences significant.

Table 34

Minutes of All Interviews by

Level of Satisfaction<sup>a</sup>

	-30	3Ø+	Totals
Satisfied	52	14	66
Needs improvement	61	6	67
Totals	113	2Ø	133

<sup>&</sup>lt;sup>a</sup>Others such as psychologists, educational specialists and division heads are not included.

The calculated chi-square of 3.91 exceeds the table value of 3.84 at the .05 level of significance. There was a significant difference in the schools' level of satisfaction

with admission procedures and the number of minutes all persons spent in interviewing as reported in Table 34. Of the 113 persons who interviewed for fewer than 30 minutes, 52 or 46% were satisfied with procedures, and 61 or 54% felt their procedures needed to be improved. Of those schools satisfied with procedures, 14 or 11% interviewed more than 30 minutes. As with the teacher interview data reported in Table 34, increased time does not increase satisfaction, so other variables such as interview techniques, personal qualities of the personnel interviewing, and methods by which the interviews were conducted would have to be analyzed. Cause and effect relationships are not revealed by this method of statistical analysis, but the researcher must assume that other variables are involved which were not measured. The total of all persons who conducted interviews indicated 66 or 49.65% of the total schools were satisfied while 50.4% or 67 of the schools indicated improvement was needed in procedures.

Tables 33 and 34 reported the significance of the time spent by teachers in the interview process on the schools' level of satisfaction with procedures. The majority of teachers, or 45% of the four categories, and the majority of all persons, or 54% of the four cells who interviewed less than 30 minutes reported their procedures needed improvement, although they were satisfactory. The length of time of the interviews did not affect the variables of student selection, and satisfaction level was not affected

by teacher experience. The lesser amount of time spend by teachers might indicate teachers were more experienced and required less interview time to evaluate candidates. The very nature of teaching is to improve on a given quantity; the choice of the procedures needing improvement category might be a reflection of teachers' recognition that all things can be improved in some way. The causes for responses were not reported.

Table 35
Minutes of Admissions Observations
by Selection Ratio

	-30	3Ø+	Totals
1-1.50	16	1.	17
1.51-2.50	6	7	13
2.51+	3	3	6
Totals	25	11	36

The chi-square value of 9.27 exceeds the table value of 5.99 for significance at the .05 level. This objective had as its focus the significance of the relationship between admissions officers observations of applicants and the impact on the selection ratio for the school. The variables of selection ratio and the time spent by directors, admissions officers and teachers in interviews,

observation and testing of applicants were analyzed by the chi-square nonparametric statistical procedure. analysis revealed the only significant variable affecting the schools' selection ratio was the amount of time spent by admissions officers in observation of applicants. Data in Table 36 reveals that schools with the lowest selection ratio of students (1-1.50) also had the highest number of admissions officers who spent less than 30 minutes observing applicants. These 16 admissions persons account for 44% of all admissions observations. Only one admissions director at a school with a 1-1.50 selection ratio spent more than 30 minutes observing kindergarten applicants. Schools with the highest selection ratio (over 2.51) revealed 3 or 5% spent less than 30 minutes with applicants. This data analysis precludes any analysis of cause and effect; however, schools with the lowest selection ratio did have admissions officers who spent the least amount of time with their kindergarten applicants.

In summary, the data analysis for Hypothesis 1.1, 1.2, and 1.3 indicated there were no differences in school reenrollment rates, satisfaction levels and selection ratios based on specificity of admissions procedures. All schools had specific procedures. Hypothesis 2.1, 2.2, 2.3 and 2.4 were analyzed and indicated no relationship between amount of training of admissions officers and the variables (a) satisfaction with procedures and (b) reenrollment rate of students. Hypothesis 2.5 indicated no significant

differences in the analysis of experience of admissions officers by (a) reenrollment rate; however, Hypothesis 2.6 data analysis revealed there was a significant difference in the years of experience of admissions officers and the variables of high, medium and low selection ratios. Schools with admissions persons with the least (less than six years) experience also had the lowest selection ratio (1-1.50). The null hypothesis 2.6 was rejected as false.

Hypothesis 3 analyzed the ranking of qualities sought by admissions persons and by university professors. The Friedman nonparametric test was utilized to analyze the independence of the ranked data. The areas of greatest disagreement on ranking of applicants were the Far West and New England. The Far West agreed most closely with the university professors.

The data analysis for Hypothesis 4 indicated there were no significant differences between the student reenrollment rate and a school's level of satisfaction with its admissions procedures.

One additional objective of this research was to measure the significance of differences between responses on the variable (a) reenrollment rate, satisfaction with procedures and selection ratio by (b) directors', admissions officers', teachers' and others' time spent in (c) observing, testing and interviewing candidates. An analysis of the data by the chi-square nonparametric procedure revealed that of the group of most satisfied teachers and

the group of most satisfied combined directors, teachers and admissions persons, each spent less than 30 minutes interviewing applicants. The admissions officers who observed less then 30 minutes had the lowest selection ratio for all groups and also the least experience (Hypothesis 2.6).

This research project did not explore the rationale underlying responses and each school's responses would have to be evaluated independently in terms of the reported responses. Responses were significant or not significant for all schools which responded, but were not necessarily significant or not significant for individual schools.

Cause and effect relationships were not explored, and factors which impacted on responses were not revealed. An individual school might wish to compare reported procedures and specific variables with its own procedures to gain insight for improvement. This research indicated the significance of a number of variables, and the lack of significance of other variables on the kindergarten admissions process reported by 119 randomly selected NAIS schools in 1982-83.

A sixth objective of this research was the development of guidelines for admissions. The guidelines for admissions were based on field practices reported by

independent schools in their responses to the questionnaire and from suggestions from university professors skilled in the theories of assessing and evaluating the abilities of young children. University personnel stressed the importance of gathering as much information as possible about kindergarten applicants in order to "...piece multiple bits of information together to form an overall evaluation or picture of the child" (M. Subkoviak, personal communication, May 6, 1983). Suggestions included selecting the intellectually mature for programs of systematic intellectual instruction (L. Feldt, personal communication, April 28, 1983). Tests recommended included the Draw-a-Person, PPVT, Stanford Binet (Form L-M), WPPSI, WISC-R, WRAT and the Metropolitan and Stanford Readiness Tests. Using tests as screening devices in order to detect "gaps in development" was suggested (V. Nauschutz, personal communication, April 28, 1983). Evaluations of prereading skills, language processing and gross and fine motor abilities were recommended for inclusion in the assessment of young children's abilities (B. Deal, personal communications, April 28, 1983 and November 7, 1983; I. Y. Liberman, personal communication, April 26, 1983; J. Smith, personal communication, April 26, 1983). Behavioral characteristics such as attention span, peer relationships and reactions to parent separation provide insight into the social maturation level of the child (C. Black, personal communication, April 27, 1983). D. Slaughter (personal

communication, May 9, 1983) stated the "hidden curriculum of the home and early learning environment need close attention." Contact with preschools and day care centers the child has attended may provide necessary information and insights (P. Blumenfeld, personal communication, April 27, 1982). A summary of procedures recommended by university personnel included parent questionnaires, interviews, observations and testing of applicants in order to evaluate the degree of fit between the applicant and the kindergarten program offered by the school (B. Caldwell, personal communications, June 6, 1983 and November 9, 1983; J. O'Packi, personal communication, May 10, 1983). After careful analysis of the data from schools and university personnel, and from information reported in the Review of the Literature, the researcher developed guidelines for assessing the abilities of young children applying to independent school kindergartens. These guidelines are reported in Chapter V.

#### CHAPTER V

# SUMMARY, CONCLUSIONS, GUIDELINES AND RECOMMENDATIONS

### Summary

This study was designed for the following purposes: (a) to investigate kindergarten admission procedures in NAIS member elementary schools, (b) to investigate and compare demographic and experiential variables and ascertain their significance in the admissions process and, (c) to formulate guidelines for strengthening and improving the independent school admission process.

### Design of the Study

The program evaluation survey was selected as the research method. This type of survey determines the effects of a program on institutional procedures and policies, according to Songquist and Dunkelberg (1977). A 25 question survey instrument was designed by the researcher to gather information on kindergarten admissions procedures and the personnel involved in the procedures. A pilot study was distributed to 24 admission directors who would not be included in the final sample. Reliability and validity of the survey instrument was established by submitting the proposed final questionnaire to randomly selected admissions

officers not included in the final sample. Reliability was established by the test/retest method of comparisons of responses. Validity was determined by analysis of questionnaire items for ambiguities and unclear items. The final questionnaire consisted of 25 items, including one open ended final question which requested respondents to note any desired or contemplated changes in the admissions process.

### Sample

The sample in this study consisted of 119 randomly selected member schools of the National Association of Independent Schools which were also designated as "Leading Private Schools" in the Handbook of Private Schools, 63rd Edition (Porter Sargent, 1982). This group of 119 randomly selected subjects represented 35% of all NAIS kindergartens listed in 1982, and 25% of the Porter Sargent kindergartens. The subjects were asked in a cover letter to complete a 25 item survey instrument constructed by the researcher. addition, 21 universities in the United States cited in The Gourman Report of 1982 (Gourman) as having the highest rated (3.5 to 5.0) schools of education were contacted for information and suggestions on evaluating the admissions process. Nine professors responded, and two recommended other professors with expertise in this research area. total number of university persons responding was 11 or 48% of those contacted.

### Procedure

Independent school admissions officers in 165 randomly selected schools were mailed a final 25 item questionnaire and a cover letter. A total of 119 or 72% responded and all questionnaires were determined to be adequate for scoring. Twenty three university professors were selected to provide suggestions for appropriate measures and techniques for evaluating kindergarten applicants to private schools. A total of 11 or 48% of the university professors responded and all responses were included in scoring. The university persons were also asked to rank order desirable qualities in applicants for admission to kindergarten. These items were listed in Question 13 on the survey instrument. The two rank orders from admissions directors and university professors were compared by the Friedman test.

### Analysis of Data

The statistical treatment of the data derived from the questionnaire required the use of the chi-square nonparametric statistic. The chi-square tests of independence were used to compare variables in this research study. The Friedman test was selected to compare group responses on one question which asked for ranking of items. Selected responses were tabulated and reported in percentages, ranges, medians and means where appropriate.

The reviews of the literature did not reveal any specific research regarding kindergarten admissions in independent schools. The review did contribute to

developing independent variables, did provide justification for the research; and it did indicate some of the methods in use for assessing and evaluating the abilities of young children of above average intelligence. In addition, the review of the literature provided the historical perspective in the independent school movement and in the genesis and development of the kindergarten.

## Findings

An analysis of the data revealed the following significant findings summarized for each of the hypotheses tested and for the relationships between the variables of (a) directors, admissions persons, teachers and others time spent in interviews, observations and testing, (b) the schools' satisfaction level with procedures, the selection ratio and the reenrollment rate, and (c) the experience and training of admissions personnel.

Hypothesis 1.1 stated that independent schools with specific procedures will have no higher student reenrollment than schools with no specific procedures. All schools in the samples reported specific procedures, so this hypothesis was not tested.

Hypothesis 1.2 stated independent schools with specific procedures for evaluating applicants will be no more satisfied with the admissions process than schools with no specific procedures. This hypothesis was rejected for testing as all schools reported specific procedures.

Hypothesis 1.3 stated schools with a large selection pool of applicants will have no more specific procedures for evaluation than schools with a small selection pool. This hypothesis was not tested as all schools reported specific procedures for evaulation.

Hypothesis 2.1 stated schools with trained admissions personnel will have no higher student reenrollment rate than schools with untrained personnel. Training was defined as ten hours of inservice which could be met by three units individually or in combination such as course work, workshops or school inservice. The chi-square analysis of data did not reveal any significant differences between the groups (Appendix F).

Hypothesis 2.2 stated independent schools with experienced admissions personnel will have no higher student reenrollment than schools with inexperienced personnel. Experience was defined as more than two years of admissions capacity experience. The chi-square analysis of the data did not reveal any significant differences (Appendix F).

Hypothesis 2.3 stated independent schools with trained admissions personnel will indicate no greated satisfaction with procedures than schools with untrained personnel. There was no significant difference in the groups; therefore, the null hypothesis was accepted (Appendix F).

Hypothesis 2.4 stated independent schools with experienced admissions personnel will indicate no greater satisfaction with procedures than schools with inexperienced

personnel. The chi-square analysis indicated no significant differences between groups (Appendix F).

Hypothesis 2.5 stated independent schools with a higher selection ratio will not have personnel with more training than schools with a lower selection ratio. A chi-square analysis of the data revealed no significant differences between groups (Appendix F).

Hypothesis 2.6 stated independent schools with a higher selection ratio will not have more experienced personnel than schools with a lower selection ratio. Selection ratios were defined as (a) low 1-1.50, (b) medium 1.51-2.50, and (c) high above 2.51. The analysis of data indicated a significant difference between groups ( $\chi^2$  = (4, N=119) = 9.83, p. < .05). Schools with the least experienced admissions personnel also had the lowest student selection rate. This low selection ratio could be due to over cautious selection of students because of inexperience of the admissions person, inexperience could be a result of instability in the school leading to brief tenure of admissions officers, low selection ratios can be the result of economic instability in the area. Each school would need to evaluate the selection ratio according to the local norms or individual circumstances. The chi-square analysis does not indicate cause of relationships.

Hypothesis 3 stated there will be no significant differences between admissions persons' rankings of important qualities for applicants to independent schools

and those qualities perceived as important by child development and education specialists in United States universities. The Friedman test was utilized to analyze the independence of these rankings of the five regions of schools, of all schools, and of university persons. The Friedman tests indicated there were significant differences between rankings. The calculated critical value of 23.14 was compared to the table critical value of 16.92 at the .05 level of significance.

Of the five school regions surveyed, only the Far West agreed with university professors that prereading achievement was of primary importance for admission to an academically oriented kindergarten. The other four regional groups unanimously selected behavior as the most important quality being considered in kindergarten applicants. Far West group consistently ranked qualities in closest agreement to those ranked by university professors. Major differences were found between comparisons of rankings by New England and Far West schools. If the ten qualities are organized into affective and cognitive traits or domains, the New England area placed more emphasis on the affective traits exhibited by applicants while the Far West Schools ranked cognitive abilities as being of greater importance to them. Parent-child relationships were ranked last or next to last in importance by all groups except New England which rated this trait fourth.

Hypothesis 4 stated there will be no significant

difference between the reenrollment rate of students and the school's level of satisfaction with its admissions procedures. The chi-square analysis reveals no significant differences, therefore the null hypothesis was accepted.

Other selected variables in this research were compared and analyzed by the chi-square procedure.

- 1. There was a significant relationship between the satisfaction level of a school with its admissions procedures and the number of minutes spent by teachers interviewing applicants. Of the schools which spent less than 30 minutes on teacherapplicant interviews, 32% were satisfied with admissions procedures, and 45% felt they needed improvement.  $\mathcal{L}^2 = (1, \underline{N}=44) = 4.66$ , p. < .05. Of the schools reporting teacher interviews, only 18% interviewed more than 30 minutes and were satisfied with their procedures. The implication was that more interviewing by teachers did not lead to more satisfaction with procedures.
- There was a significant relationship between the satisfaction level of a school with its admissions procedures and the number of minutes spent by combined directors, admissions officers and teachers interviewing applicants. Of the 113 persons who interviewed for fewer than 30 minutes 46% were satisfied with procedures, and 54% felt they could improve. The groups which interviewed

- fewer than 30 minutes accounted for 85% of all responses.  $\chi^2 = (1, N=133) = 3.91, p. < .05.$
- 3. There was a significant difference between the amount of time spent by admissions officers in observation and the selection ratio of students for schools. The chi-square analysis indicated that schools which had the lowest selection ratio, 1-1.50, also had the highest number of admissions observations of fewer than 30 minutes. Forty four percent of all observations fell into this category.  $\chi_2 = (2, N=36) = 9.27$ , p. < .05.

These three comparisons of the time variable with other variables might be of importance to individual schools analyzing their satisfaction level and selection ratios. The high proportion of schools which reported satisfaction with procedures, and which spent less time interviewing may reflect the experience level of the practitioners: Less time was needed as experience had indicated what would be significant in an interview. Schools with a lower selection ratio might evaluate the length of time spent by admissions officers in observation of applicants. This research indicated those schools with the lowest selection ratios also reported their admissions personnel spent less than 30 minutes observing applicants.

### Conclusions

The following conclusions were made from the findings of this study:

All schools surveyed had specific procedures for kindergarten admissions. These procedures included interviews, observations and testing of kindergarten applicants. Of the 119 schools randomly selected for the survey, 85% requested information from the child's previous school and teachers and 78% preferred to interview children without parents present. Of the total number of schools, 76% tested children with 64% using criterion referenced tests and 26% using standardized tests. The child was observed in a peer group in 75% of all schools. The most important qualities noted by 99% of the admissions persons were the child's behavior in the interview, and 98% felt it important for the child to follow directions.

Decisions to admit children included teachers' opinions in 78% of all schools, 71% included directors' opinions, and 69% included admissions persons' opinions. These opinions formed the basis for joint decisions; therefore, the total percentages exceed 100%. The figures for attendance at admissions inservice presentations (Question 18, Table 24) indicated that only 23% of teachers attended these presentations, while 30% of the admissions personnel and 50% of schools' directors received inservice training. This data indicated teachers were included in the majority (78%) of admissions decisions, yet received the least (23%) amount of training.

One could conclude from the data presented in Question 13, Table 20 and Hypothesis 3 that there are different

qualities of importance to admissions persons according to geographical regions. Major differences revealed the importance of affective or behavioral qualities in New England and the emphasis on intellectual or cognitive qualities in the Far West.

All schools (N=119) indicated satisfaction with admissions procedures, although 45% were totally satisfied, and 55% indicated they were satisfied, but may be able to improve. These responses were the two highest options on a four option scale of responses to the question regarding satisfaction: No schools reported dissatisfaction with procedures. The research did reveal that 48% of the schools were not at capacity (Table 7) and that 82% desired additional information on aids to admissions evaluations, such as tests (Table 29). This may suggest satisfaction levels were not reported accurately.

Guidelines were developed from responses to questions on the survey instrument, from suggestions and recommendations from university personnel involved in this research and from information revealed in the literature. The autonomous and independent nature of independent schools precludes specific, sequential guidelines and the following broad guidelines should be considered only within the context of the needs of the individual independent schools and the availability of time, funds and personnel at the school (Roedell, Jackson & Robinson, 1980).

## Guidelines for the Assessment of Young Children's Abilities

- This research revealed that the young child benefited from an evaluation which included a wide range of activities and tasks pertinent to the schools goals and objectives. There should be many opportunities for the young child to display skills in various areas of development. This would provide the school with a broad spectrum of the abilities of the child.
- While this research revealed no statistical significance in spending more than 30 minutes in observing, interviewing or testing kindergarten applicants, each school would need to evaluate its time alottment in terms of its own objectives and goals.
- 3. Assessment of abilities provides opportunity to indicate whether tasks have been mastered or not mastered, and whether there are areas needing review. The development of young children is uneven and appropriate background in child development may be helpful in decisions where uneven development is observed.
- 4. Review of the literature revealed the accuracy of evaluations were more reliable when a guide or checklist was used. In addition, a ten hour

- training period was reported which increased accuracy of gifted identification from 40% to 86%.
- 5. This project indicated all regional areas except the Far West weighted affective characteristics or behavioral qualities of applicants over cognitive abilities. Schools which do evaluate applicants on behavior may also wish to assess their need for intelligence or achievement measures if they are not relevant to the school's goals and objectives.
- 6. A postadmissions study of students may indicate specific problems in the classroom which the admissions process did not reveal. This type of evaluation may suggest other initial screening measures which would be of mutual benefit to the school and students.

## Guidelines for Evaluating the Admissions Process

While all schools reported they were completely satisfied, or were satisfied but could improve their admissions procedures, an ongoing evaluation of the admissions program may be helpful in maintaining satisfaction. The Tyler (1972) model of program evaluation was selected by the researcher because it is based on the evaluation of measurable objectives, and because it does not require extensive training to implement. The model consists of the following steps:

- 1. First, the schools' goals and statement of objectives based on those goals are formulated. The goals of the kindergarten must be defined in terms of the school's goals, then measureable objectives should be formulated according to those stated goals.
- Classification of the objectives must be based on a hierarchy or sequence of difficulty from the easiest to the most advanced and more difficult tasks.
- 3. Objectives must be defined in terms of the child's behavior and/or responses which can be observed by the school personnel.
- 4. The settings in which the objectives may be most appropriately assessed should be predetermined by the school personnel.
- 5. Before adapting particular procedures or techniques, the school must examine, select and try out those measures according to the specified objectives.
- 6. Refinement and/or improvement of measures should be an ongoing process, and objective evaluation regarding continuance or termination should also be ongoing.
- 7. The admissions procedures should be interpreted within the context of the school's stated goals and objectives and should compare the child's performance within this context.

## Guidelines for Inservice

Ninety eight schools responded to the question "What would help you in admissions evaluations?". These stated workshops, publications on admissions criteria and procedures, and lists of tests would be helpful. Of those responding, 26% were interested in workshops while the remainder preferred publications. The responses to this question and the results of the rankings of applicant qualities may indicate a need for specific workshops addressing kindergarten level applicants. These workshops may also focus on evaluating behavioral qualities and cognitive abilities in order to address the needs of the regional areas.

A needs assessment (Kaufman & Thomas, 1980) may be made and from these specific objectives developed for inservice training. This would include the needs of persons involved in admissions and could be revised regularly to reflect current concerns. This research project revealed regional differences in evaluating candidates and may suggest a need for more specific, more localized inservice which would reflect local concerns. Universities can provide good resources for training, although this research indicated they may emphasize different procedures than those which schools may select. This research also revealed that while teachers' opinions were included in 78% of all admission decisions, only 23% attended admissions inservice presentations. A needs assessment may indicate whether

admissions inservice for teachers would be useful to independent schools.

Inservice training for admissions personnel provides an excellent opportunity for educators in independent school settings to exercise leadership. According to Burns (1978) transformational leadership involves the "recognition of a real need, the uncovering and exploiting of contradictions among values and between values and practice, the realizing of values [and] the reorganization of institutions when necessary" (p. 43).

# Guidelines for Kindergarten Admissions in Independent Schools

The assessment guidelines are based on the concept that the evaluation of the abilities of young children is a highly interpersonal process because the young child is responsive to the examiner or evaluator as a person, not as a source for stimulus (Klein, 1982). A proper assessment of the abilities of young children "requires coverage of a broad spectrum of behavior, including motor and social as well as cognitive traits" (Anastasi, 1982, p. 266)
Anderson's and Messick's 1974 research also indicated multiple techniques of evaluation objectified the process of assessing the abilities of young children. Guidelines are presented for parent questionnaires, interviews, observations and testing of kindergarten applicants.

### Parent Questionnaires

Parents provide a day by day exposure to the kindergarten applicant which no other source can duplicate. The parent questionnaire or history of the child should be designed to elicit information useful to the school in understanding the child's development and the child's position in the family (Clark, 1980; Karnes and Bertschi, 1978; Robinson, Jackson & Roedell, 1978). Background information about the family such as size, education, interests, and occupations should be noted as well as the general health of family members and the applicant. hospitalizations, accidents, broken bones should be commented on. Carefully designed by the school, such questionnaires or checklists can include information about "the hidden curriculum of the early home learning environment, as well as any preschool or day care centers attended" (D. Slaughter, personal communication, May 9, 1983). The attention to "prior school experience" might require particular attention (M. Subkoviak, personal communication, May 6, 1983). Use of a parent questionnaire not only provides information, but can be used to structure the interviews.

#### Interviews

Interviews of parents and child or of parents alone or child alone will flow more easily when some kind of structure or organization has been preestablished by the

school. Information to be gained should relate directly to the objectives and goals of the interview process as well as the kindergarten. This research revealed that interviews by either teachers or admissions persons, which required more than 30 minutes to complete had no impact on the schools' level of satisfaction with its procedures, and had no significance whatever in the reenrollment or selection ratios of schools. Of the 119 schools surveyed in this research, 78% interviewed the child alone, and 36% interviewed the parents and child together. There is a total greater than 100% as 14% occasionally found it necessary to combine interviews.

The parent questionnaire can serve a dual purpose in the interview. It not only provides essential information but can serve to free the interviewer to concentrate on the child. Filling out a questionnaire which is comprehensive can be accomplished (a) in advance of the interview, if the information is used to structure the interview, (b) when the child is being interviewed or tested with the parent present or (c) when the parent is removed from the interview area.

For those schools who wish to evaluate the child without the parent present, the questionnaire process or a school tour might serve to relieve some of the anxiety of the parent who is not included in the interview. Parent questionnaires have been described in detail by Clark, 1980; Renzulli & Hartman, 1971; Roedell, Robinson and Jackson, 1980; Schmidt and others, 1982.

## Observation

Kindergarten applicants were observed in peer groups by 75% of the 119 schools which took part in the survey. In this naturalistic, yet contrived setting, observers can best interpret more subtle behaviors of a kindergarten applicant by recording behavior as soon as is practicable. Cohen and Stern (1973) describe in detail how to observe young children in various settings and how to record their behavior. Research has been cited in Chapter II which described the wariness, isolation, and other atypical behaviors of young children in unfamiliar settings. Young children's behavior requires sensitivity and objectivity in recording. Points for inclusion in observation are (a) the results of the observation, (b) specific and accurate descriptions, (c) sufficient information recorded to place behavior in context, and (d) identified interpretations about behavior (after Goodwin & Driscoll, 1980). Caldwell points out observations might be indicative of whether "the child had been pressured too much, whether the child was really not interested and the interest came only from the parents" (personal communication, June 6, 1983). Social skills can be more easily evaluated in a peer setting as can the child's ability to function with other adults in the classroom.

The research in this study indicated the admissions persons observations were significant only in the size of the selection ratio in the sample of independent schools.

Those schools with the lowest selection ratios, 1-1.50, also had admissions persons who spent fewer than 30 minutes in observations of kindergarten applicants. This research suggests those schools with low selection ratios might want to reevaluate the role of the admissions person in the observation process.

Observations can be made in many ways. Children can be included individually or in small groups in the regular classroom group for a portion of the school day, or for the entire day. Applicants may form a group which meets as a play group in the classroom when it is not in regular use and the play group may be given the experiences typical of the school day on a day school is not in session. Each individual school's assessment of time, space and personnel involved will vary according to the school's resources and needs. As with all other procedures, the school must determine, evaluate, adjust and reevaluate procedures according to the school's goals and objectives and its available resources.

#### Testing

University professors responding to this research project indicated preferences for testing hypothetical kindergarten applicants to prepreparatory schools. Standardized measures recommended for use with kindergarten age children included the WISC-R and WPPSI (Wechsler, 1974 & 1967), the WRAT (Jastak, Jastak, & Bijou, 1976), Stanford

Achievement Tests (Kelley, Madden, Gardner & Rudman, 1968),
Boehm Cognitive Skills (Boehm & Slater, 1974), Draw a Person
(Goodenough & Harris, 1963), Maturity Level for School
Entrance (Banham, 1959), Brigance Diagnostic Inventory
(Brigance, 1976), Stanford-Binet, Form L-M (Terman &
Merrill, 1972) and the Metropolitan Readiness Tests
(Hildreth and others, 1965). This research project
indicated independent schools cited these tests most
frequently (78.3%) with an addition 17% using the Gesell
School Readiness Test (Ilg, Ames and other, 1980).

Tests in the independent school setting need to be evaluated in terms of the use of the information gained, and the requirements for training the examiner. The Stanford Early School Achievement Tests and the Metropolitan Readiness Tests do not require extensive training although they may require more time to administer than the school cares to schedule. Sample tests of many tests are available for evaluation by schools, and can be acquired from the publisher. Local and state departments of instruction and/or education can provide information on testing and on the state training requirements for examiners.

In addition to standardized measures, 64% of the schools utilized tests and measures which they had designed. (See Appendix E). These criterion referenced measures compared a child's performance to a level of ability necessary to master a particular task. Although there are no norms for criterion referenced tests, mastery level of

hierarchical tasks may be established by consulting texts which are designed to sequentially present skills such as appropriate reading or motor skills manuals. These skills tasks should be defined not only in terms of children's developmental stages, but in terms of the school's kindergarten goals.

Construct validity of criterion referenced measures can be judged on the basis of (a) learning which proceeds a sequence of mastering skills and (b) the concept that scores on the criterion referenced measure will improve as a result of instruction. These tests do not assist schools in making predictions about future performance; they do indicate levels of development and achievement at a given point in time. These levels can be compared to peer levels in that school.

This research study revealed concurrence between groups of independent schools admissions personnel and university professors regarding multiple methods of assessment for young children who are applying for kindergarten entrance. The methods include interviews of child and parents, observations of the child in settings as natural as possible and both formal and informal testing. The decision as to the numbers of methods utilized and the time and personnel involved should be evaluated by each school according to its needs and resources.

## Recommendations for Further Research

The results of this research, and the process of the study have indicated areas which could be recommended for further study and review. Some of the subjects for further research may include the following:

- The limited number of studies utilizing the independent schools as subjects indicates a need for further research in this section of American education.
- This study was exclusively concerned with kindergarten admissions only. Further research into preschool admissions procedures may prove useful to admission officers and add to the independent school early childhood knowledge base.
- 3. This research did not indicate whether respondents found admissions training sessions of value to them; it only explored the level of attendance at sessions, and the types of sessions attended.
- 4. A survey methodology was utilized in this research; case studies, ethnographic methodology and longitudinal studies may provide more detailed information about the independent schools.
- 5. This research did not reveal the reasons for loss of enrollment and for low selection ratios. Studies designed to gather data on these aspects of the admissions process may serve a need for

- those schools desiring to increase their selection pools and selection ratios.
- 6. The regional differences reported in ranking of qualities of applicants and specifics of interviews, observations and testing may provide individual schools with insights for improving procedures. More specific data may also be useful to the regional and national associations in program planning.
- 7. Regional studies evaluating additional variables may provide schools with data which would provide insight into increasing applications, satisfaction levels and enrollment. These variables may include location, size, tuition, religious affiliation of schools, and socio-economic status of applicants.
- 8. A multivariate analysis may reveal relationships which are significant for combinations of variables which were not explored in this research.
- 9. Pre and post admissions study may indicate the adequacy of procedures for identifying appropriate applicants to independent school kindergartens.

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APPENDICES

APPENDIX A

November 1, 1982

Dear Admissions Officer:

In order to gain a better understanding of the nature and scope of the evaluation of applicants to kindergartens, a study is being conducted of independent schools as a doctoral dissertation.

You have been identified as a person who is knowledgeable about kindergarten admissions and this preliminary survey is being submitted to you to critique. Your comments, suggestions, additions and deletions will strengthen the survey. Please mark on the questionnaire, using the backs of pages and enclose any additional pages you would like. Please return by November 30, 1982; the questionnaire will be revised, then mailed nationally to a random sample of schools.

On completion of this research a bound copy of the survey analysis with recommendations and suggested guidelines for appropriate kindergarten admissions procedures will be sent to NAIS for reference.

Thank you for your assistance in helping to make this research of value to others who also share an independent perspective of education. Your reply will be guaranteed confidentiality.

A stamped, self-addressed envelope has been enclosed for you to return the enclosed questionnaire with your suggestions.

Sincerely,

Barbara B. Judy

1

BBJ:dsm

APPENDIX B

January 5, 1983

Dear Admissions Officer:

The enclosed questionnaire is concerned with kindergarten admissions procedures in independent schools. This study is being carried out on a national level to satisfy requirements for a doctoral dissertation. When completed, the results of this study will be available from NAIS and will provide a comprehensive survey of kindergarten admissions procedures in independent schools, recommended guidelines for evaluating applicants and objective research to support your decisions to admit or deny admission to applicants. Your reply will be guaranteed confidentiality.

This questionnaire has been preliminarily reviewed and revised so all necessary data can be obtained with a minimum of your time.

It would be appreciated of you will complete this form by January 20, 1983, and return it in the enclosed stamped envelope. If you would like a summary of the results of this study, please notify me.

Thank you for your help.

Sincerely,

Barbara B. Judy

February 1, 1983

Dear Admissions Officer:

The enclosed questionnaire is concerned with kindergarten admissions procedures in independent schools. This study is being carried out on a national level to satisfy requirements for a doctoral dissertation. When completed, the results of this study will be available from NAIS and will provide a comprehensive survey of kindergarten admissions procedures in independent schools, recommended guidelines for evaluating applicants and objective research to support your decisions to admit or deny admission to applicants. Your reply will be guaranteed confidentiality.

This questionnaire has been preliminarily reviewed and revised so all necessary data can be obtained with a minimum of your time.

It would be appreciated of you will complete this form by February 15, 1983, and return it in the enclosed stamped envelope. If you would like a summary of the results of this study, please notify me.

Thank you for your help.

Sincerely,

Barbara B. Judy

March 1, 1983

Dear Admissions Officer:

The enclosed questionnaire is concerned with kindergarten admissions procedures in independent schools. This study is being carried out on a national level to satisfy requirements for a doctoral dissertation. When completed, the results of this study will be available from NAIS and will provide a comprehensive survey of kindergarten admissions procedures in independent schools, recommended guidelines for evaluating applicants and objective research to support your decisions to admit or deny admission to applicants. Your reply will be guaranteed confidentiality.

This questionnaire has been preliminarily reviewed and revised so all necessary data can be obtained with a minimum of your time.

It would be appreciated of you will complete this form by March 15, 1983, and return it in the enclosed stamped envelope. If you would like a summary of the results of this study, please notify me.

Thank you for your help.

Sincerely,

Barbara B. Judy

APPENDIX C

# KINDERGARTEN ADMISSIONS QUESTIONNAIRE

1.	Founding date of school:	
2.	Religious affiliation? Denomination	Yes No
3.	Graded Nongraded	
4.	Amount of kindergarten tuition per year: a. Half day program	<u>\$</u>
	b. Full day program	s
	c. Half day, day care	5
5.	Maximum number of students you can accomodate in:	
	a. Kindergarten	
	b. First grade	
6.	Number of students enrolled for 1982-83 in: a. Kindergarten	
	b. First grade	
7.	Number of students who will be promoted to first grade next fall (1983-84 school year) (please include those who are not returning, but who are eligible to return):	
8.	Total number of applications received January 1, 1982 through September 1, 1982 for this school year (1982-83):	
	a. Kindergarten	
	b. First grade	
9.	Number of students now on waiting list for 1983-84:	
	a. Kindergarten	
	b. First grade	
10.	What is the amount of your application fee?	\$
11.	Do you have a separate testing fee? What is the amount of the fee for:	Yes No No
	a. Kindergarten	\$
	b. First grade	<u>\$</u>
12.	Procedures for kindergarten admissions ***IF ITEMS (a) THROUGH (g) ARE ANSWERED "YES", PLEASE CHECK POINT TO YOUR SCHOOL***	'S OF IMPORTANCE
	a. Do you interview parents only:	Yes No
	1. Seems representative of parents at this school	Yes No
	2. Able to afford tuition	Yes No
	3. Education of parent(s)	Yes ho

Kind	derga	rten Admi	issions Questionnaire		Page Two
12.	a.	4.	Reasons for applying to this school	Yes 🗀	No 🗍
		5.	Appraisal of child's abilities compared to other children	Yes 🗍	*
		6.	Reaction to separation from child	Yes 🗀	No .
			Other (please specify)		
	٥.	Do you i	interview child without parents present?	Yes 🗔	No 🗔
		1.	Achievement level in pre-reading	Yes 🗀	No 🗀
		. 2.	Achievement level in pre-arithmetic	Yes 🗀	No 🗔
		3.	Organization/expression of thoughts	Yes 🗔	No 🗀
		4.	Reaction to parent separation	Yes 🗀	No .
		5.	Behavior in interview	Yes 🗀	No 🗔
		6.	Follows directions	Yes 🗔	No 🗔
		7.	Creativity	Yes 🗀	No 🗔
		8.	Small muscle development	Yes 🗔	No 🗔
			Other (please specify)		
	c.	Do you t	interview parent(s) and child together?	Yes 🗔	No 1
		1.	Relationship between parents and child	Yes	No 🗔
		2.	Behavior changes in presence of parents	Yes	No :
		3.	Does child rely on answers from parents	Yes 🗔	No :
		4.	Do parents "cue" child	Yes 🗀	No :
		5.	Child's level of speech with parents	Yes	No 🗔
			Other (please specify)		
	đ.	Do you o	observe child in a peer group:	Yes	No 🗔
		1.	Shows interest in activities of group	Yes	No 🗀
		2.	Is fearful of group	Yes	No 🗔
		3.	Refuses to leave adults	Yes 🗔	No .
		4.	Tries to dominate group	Yes	No 🗔
		5.	Participates in activities	Yes 🗀	No 🗔
		6.	Motor control	Yes 🗀	No 🗀
			Other (please specify)		
	e.	Do you t	test child:	Yes 🗀	No
		1.	Child's reaction to test situation	Yes 🔲	No 🗀
		2.	Ability level compared to your other applicants	Yes	No 🗔
		3.	Test scores	Yes	No 🗔

Kinde	erga	rten Adm	issions Questionnaire		Pa	ge Three
12.	e.	4. 5. 6. 7.	Application of knowledge  Follows direction  Frustration level  Logical enswers (might be incorrect, but in conclytic thought)  Other (please specify)	ndicates	Yes   Yes	No
	f.	Do you 1 2. 3. 4.	Preference given if from current/past school Used for information about parents	ol parents	Yes	No O
	g.	1. 2. 3. 4. 5.	request information from previous school?  Telephone contact made with previous school Written contact made with previous school Academic level of previous school compared school Behavior of child Ability level of child School's relationship with family Other (please specify)		Yes   Yes	No
	арр В. С.	Achiever Achiever Parent/o Peer rei Organiza	in order 1-10 (1 = most important, 10 = leaseing interviewed: ment in pre-reading ment in pre-arithmetic child relationships lationships mation/expression of thoughts lease specify and rank with above items!	f. Vocabu	dary ty of speed vity ament	
	<b>3 Ot</b> m	15510n?	on 1Q score for selecting applicants for constant is the minimum score you consider for adm		for Yes	No 🗀

Kind	dergarten Admissions Questionnaire Page F				age Four
15.	Are parents present during:				
	a. Observation of child in peer group			Yes	Nc
	ь.			Yes 🔙	No 🔙
	c.	Testing		Yes 🔙	No
16.	Num	ber of years of kindergarten admissions experi	ence:		
	a.	School director or principal			
	b.	Admissions director			
	c.	Classroom teachers			
	d.	Other (please specify)			
17.	How	did you receive training for admissions?			
	a.	Academic course work (child psychology, testi development, etc.)	ng, child	Yes	No
	b.	Workshops		Yes 🔲	No 🔙
		- NAIS		Yes 🔲	No 🗔
		Other (please specify)		Yes	No =
	c.	From school administration		Yes	No 🗔
	d.	Devised own training (if yes, please elaborat	e)	Yes 🔲	No 🗔
18.	Att (co	endance at two or more admissions-related pres	entations sinc ourses, etc.):	e January, 1	981
	a.	School director or principal		Yes	No T
	t.	Admissions director		Yes :	No =
	c.	Classroom teachers		Yes =	No.
	đ.	Other (please specify)		Yes	No :
19.	Ave	rage number of minutes spent with each kinders	arten applican		
	_		Observation	Interview	Testing
	<u>a.</u>	School director or principal			
	b.	Admissions director			
	c.	Classroom teachers			
	<u>d.</u>	Other (please specify)	L		
20.	Dec	ision to admit made by:			
	a.	·		Yes	No .
	ь.	Admissions director		Yes .	No -

Kindergarten Admissions Questionnaire	Pá	age Five
20. (continued) c. Classroom teachers d. Combinations of above	Yes Yes	No
21. Published tests used:  a. WPPS1/WISC-R  b. Stanford-Binet (Form L-M)  c. Metropolitan Readiness d. Draw-a-person Others (please specify)	Yes Yes Yes Yes	No
22. Have you designed your own tests and/or checklists for admissions	s evaluation Yes	s?
If yes, would you please enclose a copy?  23. Evaluate your satisfaction with your current policies/practices:     a. Our current policies/practices fully meet our objectives.     b. Our current policies/practices are satisfactory but could be c. We are not satisfied with current policies/practices.     d. We have no standard procedures.	•	ck)
24. What would help you in admissions evaluations? (please check) a. Workshops b. Publications on admissions criteria and procedures c. Lists of tests available d. Other needs (please specify)		0000
25. What specific changes would you like to make to improve your adm	nissions prod	cedures?

Thank you for completing this survey. Please mail the questionnaire and any self-designed tests in the stamped envelope provided

March 30, 1983

Dear Admissions Officer:

The enclosed questionnaire is concerned with kindergarten admissions procedures in independent schools. This study is being carried out on a national level to satisfy requirements for a doctoral dissertation. When completed, the results of this study will be available from NAIS and will provide a comprehensive survey of kindergarten admissions procedures in independent schools, recommended guidelines for evaluating applicants and objective research to support your decisions to admit or deny admission to applicants. Your reply will be guaranteed confidentiality.

This questionnaire has been preliminarily reviewed and revised so all necessary data can be obtained with a minimum of your time.

It would be appreciated of you will complete this form by April 15, 1983, and return it in the enclosed stamped envelope. If you would like a summary of the results of this study, please notify me.

Thank you for your help.

Sincerely,

Barbara B. Judy

APPENDIX D

March 30, 1983

Dear Professor:

I am writing to you to request your professional suggestions and comments.

I am preparing a doctoral disseration which will include a national survey investigating the identification of abilities of kindergarten applicants to non-public schools. Based on your knowledge of assessing and evaluating the abilities of young children, I would like your suggestions about assessments of young children.

To hypothesize: If you were the director of a kindergarten program in a college preparatory school, what methods would you use to assess the abilities of young children applying for admission to your school? In what order of importance would you rank the criteria in Question 13 on the enclosed questionnaire.

Your reply will be used, in part, to construct a guide for use by admissions persons in independent schools. This guide will then be available through the National Association of Independent Schools. I would appreciate permission to cite your reply in my research; however, if you prefer anonymity I will respect that. Please so state.

I welcome any suggestions you may want to submit. I would appreciate a reply by April 15, 1983 and have enclosed a stamped, self-addressed envelope. If you would like a summary of results I would be pleased to mail them. Thank you for your assistance.

Barbara B. Judy

APPENDIX E

# SCHOOL A

Time of Visit:	Interviewers _	
	<del></del>	
ENTERIN	IG K	
NAME	AGE, SEPT.	·
BIRTHDATE		
SCHOOL	•	
Free Play		
Separation from Parent (3-1)		
<pre>3 = appropriate; 2 = with encour 1 = difficulty</pre>	agement;	
Respect for Other's Work and Mat	cerials (3-1)	
3 = yes; 1 = no		
General Activity Time Level (3-1		
Work Time (3-1)		
Fine Motor Coordination (3-1)		<del></del>
<pre>Understands Directions (3-1)</pre>		
<pre>3 = yes; 2 = reminded once; 1 = numerous questions</pre>		
Confidence Levels (3-1)		
3 = high; 2 = medium; 1 = low		
Body Language and Posture (3-1)		
<pre>3 = remains in chair; 2 = sits of 3 = squiggles</pre>	on feet;	
Group Time		
Ease of transition to rug (3-1) Able to attend to story (3-1) Able to perform in group seting	(3-1)	

# Entering K - p.2

Sentence Repetition - Individual	Name
1. Susan has a yellow coat.	<del></del>
2. Pam has two cats and a big furry	dog
3. Peter would like to have new pai	nts and an easel.
4. The heavy snow which fell last n for school.	ight made many buses late
<ol><li>Next Monday our class will be ha your lunch and a blanket.</li></ol>	ving a picnic. Bring
Paper Work	
copy - 6 points	(6)
cutting - 3 points	(3)
letter and number identification - 6 points	(6)
name writing - 2 points	(2)
<pre>sentence repetition - 6 points (2 pts. for eachof 1st 3;   extra credit for 4 &amp; 5)</pre>	(6)
self portrait - 7 points	(7)
Skills Total	(36)
Observation Total (out of 30)	(30)
Grand Total	(out of 69)
General Comments and Recommendation	ns:
	Take (How strong a take?)
	Discuss
	NO

### SCHOOL B

# KINDERGARTEN INFORMATION FORM

Appl	icant
1.	Total number of students in: the school the class
	Total number of teachers per class:
2.	Please briefly describe your program.
3.	Transition into your class: the student was a. hesitant b. willing c. enthusiastic d. other
4.	Separation from mother: a. done easily b. needed gradual withdrawal c. other
5.	Have you noticed any changes in the child's behavior since he/she entered your school?
6.	For Kindergarten applicants: our school day is long (8 am to 2:30 pm). At this time the applicant appears to:  a. be ready for a longer day b. tires easily in your program
7.	Large group activities: this student a. volunteers information easily b. needs encouragement to participate c. rarely contributes d. other
8.	Small group activities: this child a. volunteers information easily b. needs encouragement to participate c. rarely contributes d. other
9.	Briefly list situations in which the child would be able to focus his/her attention for comparatively long periods of time.
	Briefly list situations in which the child would be able to focus his/her attention for comparatively

10.	Approach to new tasks: the child is a. eager b. hesitant c. needs encouragement d. other
11.	Does this child demonstrate leadership qualities? In what type of situation?
12.	Does this child tend to play alone, need a special friend, or can he/she play easily with a variety of children?
13.	Please describe his/her large motor coordination.
14.	Please describe his/her small motor coordination.
15.	Verbal skills: does the child a. speak fluently, using complete sentences b. speak in phrases c. have difficulty expressing ideas and/or needs d. other
16.	Vocabulary: is the child's understanding and use of words a. sophisticated for his/her age b. age appropriate c. somewhat immature
17.	Does this child show any special interest in a particular subject of area (i.e. numbers, letters, dinosaurs, blocks, puzzles, etc.)?
18.	If we accept this child, is there any specific information we should know to help make a smooth transition from one school to another?
Teac	her
Scho	ol

# Kindergarten Screening

Name		Age	_ Date
General K	nowledge		
Knows:	full name	first nam	ne only
	phone number	birthday	
	number of people	e in family _	
	colors: red	orange	greenblue
	yellow_	purple	brownblack
	can count conse	cutively from	one to
	can touch and c	ount from one	to
Body Imag	е		
With eyes closed can touch: eyes feet elbows ears shoulders mouth hand hips ankles Can hop: on two feet on left foot on right foot (which is better?			
Can skip Can follow simple directions (given only once):			
"tur "tou	nd behind your c n around, then s ch your nose, to	it down"	s, then touch your
Small Mot	or Coordination		
Can Can Can	write name ( write numbers Ø cut (which draw circle tie shoes	- 10 hand?) L R	
Figure -	Ground Test		
Visual Di	scrimination Tes	t	
Auditory Language	Discrimination T	'est	
Draw your	self		

### SCHOOL C

Name				_ D	ate		
Previous School							
Class_			Age	Ph	one	· · · · · · · · · · · · · · · · · · ·	
B. Does child C. Can child i		ectionality and Does child know Does child know Can child imita Can child touch	parts right te body	of his ow and left movement	on hims	elf?	

- II. Gross Motor Development
  - A. Can child jump, skip, hop, etc?
  - B. Can child walk along, one foot directly in front of the other?
- III. Small Muscle Coordination
  - A. Can child copy designs from model?
  - B. Can child copy (3- ) from memory?
  - C. Can child write any letters of name (note holding of pencil-hand preference)
  - IV. Auditory Perception
    - A. Can child repeat tapping pattern? (done with pencil on table)
    - B. Can child discriminate between sounds which are similar -- "Am I saying same words or different words?" (tub-tug, man-men, king-king, pen-pin, save-shave)
    - C. Can child repeat digits in sequence 28 685 64 714
    - D. Can child understand and recall commands?1
    - E. Can child hear rhyming words?
    - V. A. Can child match shapes, letters and see the one that is different?
      - B. Can child copy head design
      - C. Can child recall shape on table which has been removed? (4)
      - D. Can child recognize colors?
  - VI. Concept Development
    - A. Ask child:
      - 1. How old are you?
      - 2. When is your birthday?
      - 3. Where do you live?
      - 4. Whay day is today?

- VII. Language Development
  - Can child identify with pictures?
    - 1. pig

    - 2. earn of corn3. pair ot boots
  - B. Does child speak in sentences?
  - Can child name 2 veg., fruits, colors? C.
  - Does he understand simple concepts--over, D. under, between?

### VIII. Letter Recognition

- A. Can child name any U/C letters?
- B. Can child name any L/C letters?

#### IX. Conceptual Skills

- A. Can child name numerals 1-10?
- Can child put numerals 1-10 in order?
- Can child put 5 beads on numeral 5?

### Social Evaluation

- A. Does child accept limit?
- B. Does child follow directions?
- C. Does child have reasonable self-control
- D. Is child cooperative?
- E. Does child possess a positive attitude?
- F. Does child know how to share?
- G. Is child curious about materials?

### SCHOOL D

# Evaluation of Applicant (used by school and sent to previous school)

Name
Grade applied for
Please comment on the following:
Ability to concentrate:
Ability to communicate (language development):
Use of work materials:
Behavior with peers and teachers:
Any problems:
For grades kindergarten through four:
Reading ability:
Math ability:
SignedDate
Position

## SCHOOL E

ADMISSION'S EVALUATION.
Visitor's Name Grade or Class visited
Did this child appear to be:contentnervousresistantpassiveagressivecooperativeaccepted by our pupilsnot accepted by our pupils
Homeroom Teacher
Did this child appear to read and comprehendbetter thanthe same asnot as well as my reading group?
Reading Teacher
Did this child appear to calculate and understand math concenptsbetter thanthe same asno as well as my math group?
Math Teacher .
Did this child seem to writebetter thanthe same asnot as well as my English class?
English Teacher
Optional comments: Use reverse side when necessary.
French:
Science:
Social Studies:
Gym:
Further Comments:
Plase attach samples of this child's math, writing (and

### SCHOOL F

Name _			A <sub>1</sub>	pplying for	grade	
Date of visit			To	Teacher		
I.	ACA	DEMIC - (Be	specific)			
	1. 2. 3. 4.	Does child and letters Does child able to dra Is child all effectively Academical	have any printi aw and color? ble to use word:	nowledge of ing skills? s to communiou classify	Is child	
1		2	3 Average	4	5	
Unacce	ptab	le	Average	Ver	5 y Acceptable	
	6.	Did you not	ce any areas of	concern?		
II.	SOC nec	IAL - Circle essary.	e one - Add com	ments to cla	rify if	
	1.	How did ch	ild relate to p	eers?		
1		2	3	4	5	
Loner			3 Average	Ver	5 y Gregarious	
	2.	How did ch	ild relate to t	eacher?		
1		2	3 Agerage	4	5	
Uncoop	erat	ive	Agerage	Very	5 Cooperative	
	3.	Was child	willing to comp	romise?		
1_		2	3	4	5	
Never			Sometimes		Always	
	4.	Socialy, he candidate?	ow would you cl	assify child	as possible	
1		2	3	4	5	
Unacce	ptab		Average		y Acceptable	

5. Did you note any areas of concern? Did child show any signs of emotional disturbance or behavioral problems.

### III. WORK HABITS

1. Did child work independently?

1	2	3	4	5
Lacks		Average	Very	Independent
Independent				

2. Did child listen to and follow directions?

1	2	3	4	5
Never		Sometimes		Always

3. Did child see task through to completion?

4. From the viewpoint of work habits, how would you classify child as possible candidate?

1	2	3	<b>4</b> <sup>-</sup>	5
Unacceptable		Average	Very Ac	ceptable

- 5. Did you note any areas of concern?
- IV. FURTHER COMMENTS (f not included elsewhere, note comments of teachers at P.E., lunch, etc.; also your overall intuition of child's suitability for this school)

### SCHOOL G

Name: Birthday: Age when school begins: Interview Date: Previous School: SMALL GROUP WORK: (attention to small motor skills) Cutting: Writing Name: Holding Pencil Hand: Pasting: Copying Shapes: Writing Numerals: Pattern Completion: Verbal Communication: INDIVIDUAL ACADEMIC WORK: Recog. Upper Case Letters: Recog. Lower Case Letters: Initial Consonant Sounds: Rhyming: Sequencing: Sight Word Recog .: Spatial Directions:

Opposites:

Number Recog.:

Recog. Colors/Words:

Counting:				
Recog. Equal/Unequal:				
Simple Addition Problems: Oral: Written:				
GROSS MOTOR DEVELOPMENT:				
INDEPENDENT PLAY:				
GROUP: (listen to story, sharing)				
SUMMARY:				
Academic				
Social/Emotional				
RECOMMENDATION TO ADMISSIONS COMMITTEE:				
Interviewing Teachers:				
Accept Defer Reject				
Reasons for defer/reject:				
DECISION OF ADMISSIONS COMMITTEE:				
Accept Defer Reject				

Comments:

### SCHOOL H

### Kindergarten Admissions Interview

Name
Birth date
Age at testing
Age when school begins
BASIC SKILLS

Colors - knows 8 basic

Letters - alphabet
Writes names
Identifies letters in name
Recites ABC's
Identifies ABC's in order - out of order
Copies ABC's
Writes ABC's without stimulation

Numbers
Counts #'s by rote
Counts objects
Identifies #'s
Writes #'s

Reading Sight words Phonetically

Grouping levels
Beginning - basic skills
Readiness skill level
Advanced readiness skill level
Reading - group

### VISUAL PERCEPTION

Shapes Draws Names

Blocks 1-2-3-step directions follows block design on printed card reproduces block design on plain card FINE MOTOR SKILLS

Handling of pencil

crayon

scissors

Eye-hand coordination

Left to right progression

Handedness

Spacing work

VERBAL DEVELOPMENT

Speech - quality

quantity intelligibility

Verbal facility

GROSS MOTOR SKILLS

Balance

Physical Coordination

Eye - body coordination

GENERAL INFORMATION

Stamina during testing Physical condition

Personality

Behavior
Maturity level
Social ease
Separated

Attention Span Follows 1-2-3-step directions Distractible

Interest area: physical social academic

General intelligence

Special needs:

socialization

fine motor development gross motor development language development basic skills

challenge

TLC

control - direction

other

### COMMENTS:

# SCHOOL I

To:	
Re: Interview Report for	·
Applying for grade	Year
Age Birth	Date
Interviewer	Date
Appearance:	
Physical Maturity:	
Intellectual Maturity:	
Social Maturity:	
Parent Interest in total K-12	Program:
Summary and recommendation for placement.	acceptance and grade

### SCHOOL J

Child	d's Name
Date	
Ι.	Drawing: "Pleaes draw me a picture. You can decide what you would like to draw. When you are finished, I'd like to keep the picture. Ask the child to tell you about the finished pictures and write down the response.
II.	Oral Lanuage:
	1. What is your name?
	2. How old are you?
	3. Where do you live?
	4. Do you go to Nursery School? Where?
	5. Tell me about your family.
III.	Sequencing:
	"Here are some cards that tell a story about The are mixed up. Would you put them in order so they tell what happened in the story?"
	Ask the child to tell the story when finished.
	Logical?
	Left to right Vertical Right to left
IV.	Tracing Circles (41/2" diameter):
	"Here are three circles. Can you trace them with your finger? (If not, demonstrate.) Now, take any crayon you'd like and trace them for me."
	Followed lines? Same direction
	Turned paper Smoothness?

#### V. Likenesses:

Point to the first illustration. "These two things belong together. Why do you think they go together?" Write any unusual responses; otherwise Y if correct, X if incorrect.

#### VI. Pattern Repeat:

A. 3 color Pattern Repeat.

"Here are some blocks. I'm going to make a design with them. Watch me. Please made a design that looks just like mine."

	just like mine."	
Left	to right	Right to left
Vert:	ically	On top
	B. 2 Shape, Same Color Repea	t
	"Here are some pegs and block design with them. Watch me. that looks just like mine."	s. I'm going to make a Please made a design
Left	to right Right to 1	eftVertical
VII.	Echo:	
	"I'm going to say some words just as I do." (animals, an	<ul> <li>Listen and say them imals, animals)</li> </ul>
	Animals Hospital Spaghetti	

#### VIII. Letters

Elephant

"There are some letters in this box. (point to the box.) Take your \_\_\_\_ crayon and put a circle around the \_\_\_\_.

#### IX. Gross Motor:

"Please walk across this board." "Walk back across."

Oral Lanuage Summary:
Speaks in complete sentences Speaks logically Articulation
Work Habits:
Right handed Left handed Sticks to the task Pencil grip Auditory attention Mannerisms
Comments:
Social Behavior:
Plays alone Plays cooperatively Makes good choices Cares for materials

Comments:

#### SCHOOL K

### Parent Observation Checklist

### Academic Readiness

Knows all colors Counts to twenty
Recognizes and identifies alphabet
Recognizes and identifies single digit numbers
Can write letters
Can write numbers
Puts simple puzzles together
Uses scissors for cutting
Colors mostly within outlines
Knows all major body parts
Knows shapes (circle, square, rectangle, triangle)
Wants to be read to
Looks at book on own initiative
Asks questions about environment
Asks meanings of words
Enjoys copying
Knows nursery rhymes

#### SCHOOL L

Student's	Name	School
Reporting	Teacher	Phone

#### Does the Child:

- 1. Listen attentively for a sustained period of time?
- 2. Show interest in books and stories?
- 3. Follow simple spoken directions?
- 4. Work well independently?
- 5. Stick to a task?
- 6. Become easily distracted by movement, noise, etc.?
- 7. Appear mature?
- 8. Get along with classmates?
- 9. Enjoy companionship?
- 10. Show self-control?
- 11. Participate willingly in activities?
- 12. Cooperate as a member of the group?
- 13. Have a positive self-image?
- 14. Work well independently?
- 15. Respond favorably to correction?
- 16. Assist in clean-up willingly?
- 17. Accept changes and disappointments?
- 18. Express self well in sentences?
- 19. Enunciate clearly?
- 20. Use scissors, pencils, and crayons with ease?
- 21. Appear well-coordinated in running, walking, and hopping.

#### SCHOOL M

Child's	Name
Age	
Date	

The evaluator will ask the following questions and indicate a correct response by checking.

- Please pull out your chair and sit down. (large motor coordination)
- What is your name? (language and thinking)
- 3. This is my little bear, Cedric. Can you put him on the table? Under the table? Behind you? In front of you? Above you?
- 4. See my pretty crayons. Give me a red crayon. What color is this one? Where is the yellow crayon?
- 5. Do you have some scissors at home? (used right or left hand?) Use my scissors and cut along this line. (hand-eye, small muscle coordination)
- 6. Let's play another game. (perceptual motor body image) What is this? (point to leg, arm, hand, foot, neck, eye, nose, ankle, wrist, elbow.)
- 7. I'd like to see you work my puzzle. (3 dimensional form perception).
- 8. Count for me.
- 9. Showing the child a circle, ask, "What is this shape?"
  Show square, triangle, rectangle, etc.)
- 10. Show the child a book. "Would you like to look at my book? What is your favorite picture? Why?
- 11. Does child hold book with words upright?
- 12. Does the child handle the book carefully?
- 12. Does the child verbalize an appropriate response to picture request?
- 13. Is it in a sentence?

- 14. "Do you like books? (language and thinking)
- 15. Show pictures of several animals. Ask their identity.
- 16. Evaluator asks the child to draw himself/herself.
- 17. Evaluator prints the child's first name on the drawing and asks, "Can you read this word?"
- 18. Is the table soft or hard?
- 19. Show me the first teddy bear in this line. Show me the last teddy bear in this line.
- 20. Can you sing the A B C song with me? (Evaluator sings only the first words and then listens to the child.)
- 21. Now let's stand up and put your chair back under the table.
- 22. Stand on one foot. Hop on one foot. Hop on the other foot. Jump on two feet. Walk backwards. Gallop. Balance on one foot.
- 23. Show letters X O A B Z
  Ask what they are.
- 24. Additional observations and comments of the evaluator as to behavior, attitude, performance, etc.

#### SCHOOL N

Rate from Ø (did not respond) to 3 (excellent) Ø 1 2 3

1. Gross Motor:

- a. hops on each foot
- b. jumps in place
- c. catches ball 2 out of 3
   (3 ft. from tester)
- d. heel to toe (4 steps) 2 out of 3 times
- e. backwards heel to toe
- 2. Body Build general appearance; coordination:
- 3. Language:
  - a. What do you do when you are cold?
    " " " " " hungry?
    " " " " tired?
  - b. Put the block on the table under the table behind the chair
  - c. What color is this? (red)
    " " " (blue)
    " " (yellow)
  - d. If fire is hot, ice is ?
    mother is a woman, Dad is a
    a horse is big, a mouse is .
  - e. What is a ball? " lake? 11 11 " desk? 11 " house? \*\* 11 11 " banana? 11 11 " curtain? " ceiling? 13 11 " hedge? 11 " pavement? (6 out of 9 is good)
  - f. Gives first and last name
  - g. What is a spoon made of?
    " " shoe " ?
    " door " ?

```
4. Fine Motor - Adaptive
     a. copies + (do not demonstrate)
                  (" " " "
     b. copies
                  ('n
                       11
     c. copies
     d. picks longer of 2 lines:
     e. (turn paper upside down - repeat)
     f. imitate bridge (3 blocks)
Rate from \emptyset (did not respond) to 3 (excellent) \emptyset 1 2 3
     g. imitates bridge after demonstration
     h. tower of 8 cubes
     i. draws man - 3 partsj. draws man - 6 parts
     k. take the peg from bottle - spontaneous
     1. take the peg from bottle - after demonstration
m. buttons a button
5. Emotional - social
     a. self-confidence
     b. initiative
     c. speech clarity
     d. separates from mother easily
     e. relation to tester
     f. attention span
6. Complete a person (drawing)
```

7. Comments: (most important)

### SCHOOL Ø

High Medium	Date Age
Uneven Low l. Name	3
2. Whois in your family?Namerelationship	2
3. Do you have any pets? What do you like to p you play with? Sentence level - no reponse, short sentences, extended, past, future, adjecti	single word,
Did child ask any questions YES NO Speech	
Does child needs repeats YES NO	1ø
With Test Materials - Free play What did you make  1. Name colors 1-3 4-6 More  2. Can you count? 1-5 to 10 to 20  3. Count objects 1-3 to 6 to 10  4. How many? 3 7 11  5. Which group has more 3&7 4&6 5&5  6. Give me the little one, give me three  7. Order by size not at all, with model, with he  8. Sort objects, why? shape, function, some, and  9. Tell me the numbers 5 2 7 13 27 44  10. Which one is the biggest number?  11. Name these letters A K R F  12. Match the shapes  13. Can you tell me these words  STOP UP SCHOOL KINDERGARTEN	3 3 3 3 3 1
PHYSICAL Walk along line Hop Yes No	Left Right
backwards sideways	
Left/Right hand, in writingt left right both	o sort
What happens in this book?	
<pre>child's name, eyes, nose, 2 arms, ears/hai legs/feet, fingers, clothes</pre>	r, long body,
COMMENTS	

### SCHOOL P

Candidate's name Date of birth Parents names: Address: Telephone: Candidate's present school
<pre>Physical Development 1. Coordination small, large 2. Activity level     a. Tends to move quickly from one activity to another     b. Quite/passivewaits to be directed     c. Seems self-directed 3. Ability to care for needs</pre>
Mental Development  1. Language ability receptive and expressive  2. Curiosity and creativity  3. Interest in pre-reading and/or math materials
Emotional Development  1. Appears self-confident  2. Assertive aggressive has tendency to "take over"  3. Patient, polite, accepting of others  4. Accepting of directions given by authority figure
Social Development  1. Seems to adjust to new situation  2. Friendly, outgoing  3. Able to work within a group  4. Prefers solitary activity
Work Habits  1. Takes care of materials  2. Follows directions  3. Seems attentive  4. Works independently does not demand supervision  Other comments:
( ) Outstanding candidate ( ) Check with present school ( ) Very good - qualified ( ) Too young-ask back
for re-test () Good - acceptable () Too old-ask back for
re-test  () Satisfactory- acceptable () Too young-defer until only if better candidate next year not available
( ) Unsatisfactory Observer

### SCHOOL Q

Name	
Date Pre of K	
Colors	_
Right Handed Left	
Follows Directions	
Answers to Questions Simple Complex (Why)	
Complex (wny)	
Shy	
Attention Span	_
Counting 1-19	_
Recognizing # of things without counting	
More and Less	
Larger and Smaller	
Dependency on Mother/Father	
Rating for acceptance	

Name
1 2 3 4
4 2 3 1+2 = 3-1 = +1 +2 +1
1+5 = 2-2 =
Write: One Three Two2 One 3 Three Four
Five Six Three
What comes before: 5    2
What comes after: 3 4 5 2 1 6
Matching u/c, l/c letters letter sounds Color name identification
Reading 3 letter short vowel words beginning and ending sounds
How much is a penny, nickel, dime, quarter?
Discuss interests
Draw self
Questions for Pictures/Oral Language (Logic, sequence, sentence structure, vocabulary)
<ol> <li>What is different? (between things which have similarities)</li> <li>What kind of store is it? (talk about what they'd buy in toy store listen for speech patterns)</li> <li>What room in the house is this? (what's in the room that makes you know it's a bedroom, etc.)</li> <li>(Picture of steam) What's this? What causes steam?</li> <li>(Picture of rainbow) What's this? What is the weather like outside when you see a rainbow?</li> <li>What tool? What do you think he's making (see if they can imagine)</li> <li>What place? (school) How do you know it's a school?</li> <li>(Picture of snow) What is it? How does it feel? What do you use to protect your hands?</li> </ol>

- 9. (Picture of sailboat) What kind of boat is this?
- What makes it go?
  10. (Picture of night) Is it daytime or nightime? What's in the picture to tell you it's right?
  11. (Picture of a park) Is it inside or outside? Why?
- 12. Sequence Pictures planting a seed to full plant

#### SCHOOL R

Name
Present 10 Cubes - Can you build a tower?
Build (child does not observe construction)
Present 3 cubes to child - can you build one?
If yes to above, try (use cardboard base)

Build 3 base staircase show it to child Knock it down and ask child to do it.

Present copy paper, blank side up.

- 1. Can you write your name? Last too?
   If no, any letters?
   if no, can you make an A? etc.
- 2. If time How far can you make your numbers? Present copy forms. Can you make one just like this? Note direction of strokes.

#### SCHOOL S

USE GESELL

Note:

Independence

Attentiveness

Approach to work

Pace

Copying

Relationship with tester

Conversation

Drawing - ideas

Relative comfort (verbal and pencil/paper)

Pencil grasp/control

#### Requested from Previous School

Applicant's Name\_\_\_\_\_

Relationship with classmates:

Relationship with adults:

Cooperativeness:

Personality:

Ability to follow directions:

General behavior pattern:

Remarkable strengths:

Remarkable weaknesses:

Group participation:

Self concept: (Circle one) Good Average Poor

Auditory perception: Good Average Poor

Motor coordination: Good Average Poor

Curiosity: Good Average Poor

Work habits indicate:

efficiency average organization disorganization

great independence average independence dependence

persistence average coping frustration

Learning has been: fast average slow uneven

Is maturity consistent with what you would expect?

How is adjustment to new situations, including first weeks in your school?

Give a brief description of the home environment, the qualty of support the child and the school could expect to receive.

The academic program at the school is a demanding one. Do you believe the applicant is mentally and physically able to meet the demands which will be placed on him/her?

How long has the child attended your	school?
Have all financial obligations been met?	promptly and completely
Would you wish to discuss the applic	ant more fully?
School	Date
Signature	Title

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Applicant's Name You would like child called
Grade
In order to aid the school in dealing with you and your child to the greatest advantage, we would very much appreciate your coopereation in answering the following questions, including any information you would consider significant.
Describe child's relationship with other members of the family.
Adults:
Children:
What compansionship has he/she had with children of his/her own age?
What is his/her attitude toward school?
What has been his/her previous experience with school?
How does he/she follow directions.
Who would oversee his/her homework and reading at home?
In a word or two, how would you describe his/her personality?
What are his/her special interests?
Has he/she had any experiences which have particularly influenced his/her development either in or out of school?
Does he/she prefer to do tasks alone or with someone?
Is there anything in his/her health record which would influence his/her school work or of which we should be aware for any reason?

APPENDIX F

### Hypothesis 2.1

### Units of Training by Reenrollment

	2 or less	3	4+	Total
-80%	3	14	7	24
81-90%	. 3	10	6	19
91%+	.11	48	17	76
Total	17	72	3Ø	119
$\frac{1}{2} = (4, \underline{N} = 1)$	19) = 1.09, <u>p</u> .	< .05		

# Hypothesis 2.2

### Years of Experience by Enrollment

	6 or less	7-10	11+	Total
-90%	34	9	8	51
91-95%	23	1	7	31
96%+	19	9	9	37
Total	76	19	24	119
$\frac{1}{2}^2 = (4, N = 119) = 7.26, p. < .05$				

### Hypothesis 2.3

### Units of Training by Satisfaction

	l or less	2-3	4+	Total
Satisfied	8	37	13	58
Could be Improved	9	35	17	61
Total	17	72	3Ø	119
$\frac{1}{2}$ = (2, $\underline{N}$ = 119)	= .57, p. <	. Ø5		

### Hypothesis 2.4

Years of Experience by Satisfaction

	6 or less	7-9	1Ø+	Total
Satisfied	20	18	20	58
Could be Improved	31	13	17	61
Total	51	31	37	119
$\frac{1}{2}$ <sup>2</sup> = (2, $\underline{N}$ = 119) = 3.35, $\underline{p}$ . < .05				

### Hypothesis 2.5

## Units of Training by Selection Ratio

	2 or less	3	4+	Total
1.0 - 1.50	10	5	2	17
1.51 - 2.50	37	21	14	72
2.51+	16	11	3	30
Total	63	37	19	119
$2^{2} = (4, \underline{N} = 119)$	= 1.95, <u>p</u> .	< .05		

#### Hypothesis 4

### Reenrollment by Satisfaction

	-90%	91-95%	96%+	Total
Satisfied	12	9	37	58
Could be Improved	12	10	39	61
Total	24	19	76	119
$\mathbf{Z}^2 = (2, \underline{N} = 11)$	9) = .03,	p. < .05		