# REPORT OF THE

# JOINT SUBCOMMITTEE ON CERTAIN ASPECTS

# OF KINDERGARTEN PROGRAMS, PURSUANT TO

# HOUSE JOINT RESOLUTION NO. 236

# TO

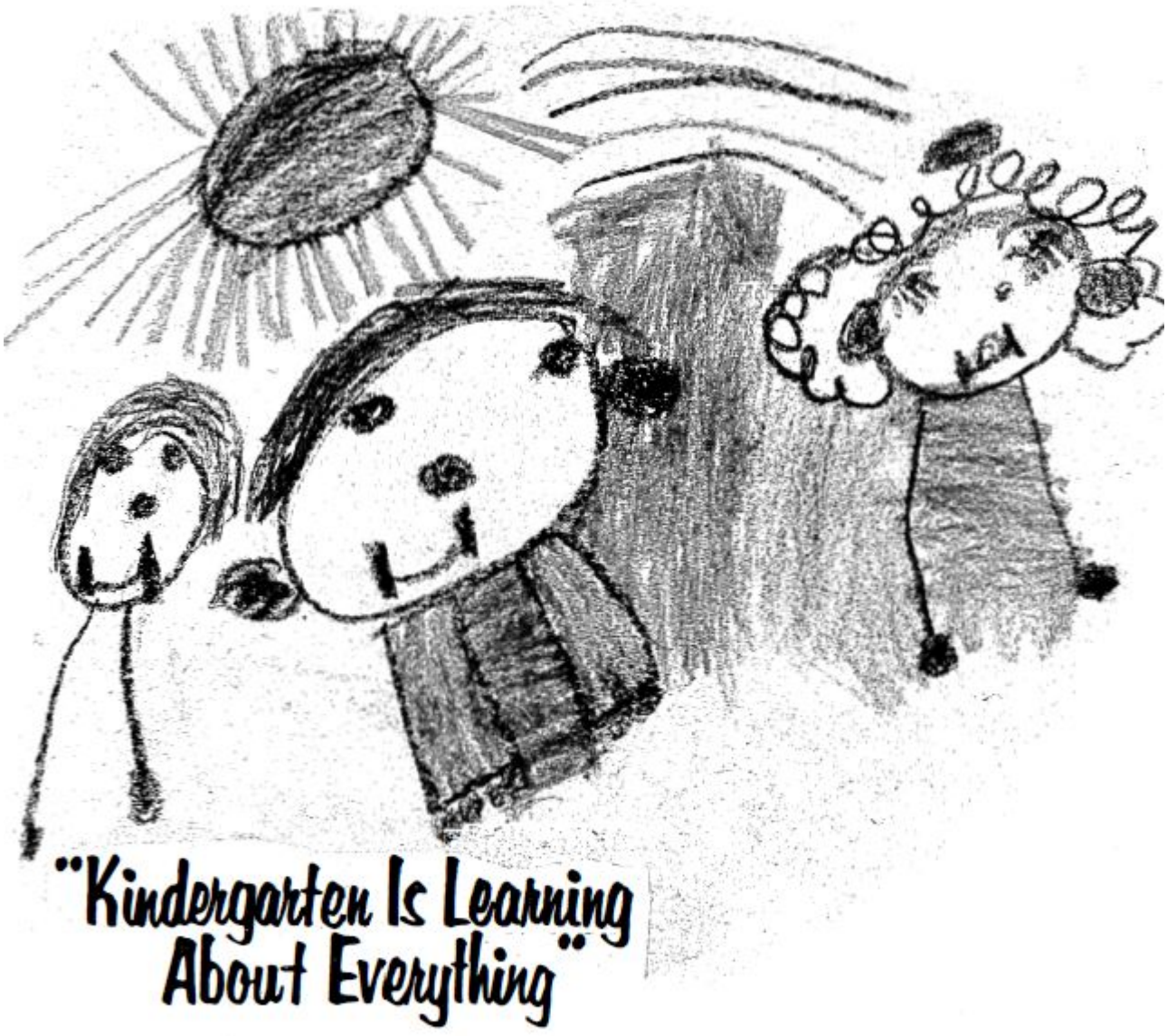
# THE GOVERNOR

# AND

# THE GENERAL ASSEMBLY OF VIRGINIA


**HOUSE DOCUMENT NO. 10**

**COMMONWEALTH OF VIRGINIA**
**RICHMOND**
**1980**


"Kindergarten Is Learning
About Everything"

## MEMBERS OF THE JOINT SUBCOMMITTEE

Dorothy S. McDiarmid, Chairman
A. Joe Canada, Jr.
Caroline Clark
Joan S. Jones
Janice Mack
Alexander B. McMurtrie, Jr.
Alice M. Powell
Jane Ring
Stanley C. Walker
Patty Withrow

## STAFF

### Legal and Research

Division of Legislative Services

Katherine L. Goolsby, Senior Attorney
Brenda H. Edwards, Legislative Research Associate

### Administrative and Clerical

Office of Clerk, Senate of Virginia

Office of Clerk, House of Delegates

### Consultants

Department of Education

Mr. Bernard R. Taylor, Director of Sciences and Elementary Administration
Mrs. Grey W. Ritchie, Supervisor of Kindergarten, Division of Sciences and Elementary Administration

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## Summary of Report

The joint subcommittee has been diligent in its study of certain aspects of kindergarten programs in the Commonwealth. The data utilized in the study were obtained through responsese to a questionnaire, through a search of the literature for pertinent research, through observation of programs, and through discussion with a number of educators, including both teachers and administrative personnel. All information was reviewed and carefully considered before formulating the recommendations offered in this report.

Very early in the study it became evident that the kindergarten program affects and is affected by the program of the primary grades and cannot be considered as a separate unit. Kindergarten is, and should be, an integral part of the early childhood program, encompassing nursery school, kindergarten and the primary grades (NK-3). The joint subcommittee found that there is a need for increased and improved communication among teachers of these levels to facilitate continuity of the program in the early childhood span. These teachers have much information to share about child development and the learning process.

Young children are essentially exploratory learners who use their senses in discovering the world about them. From opportunities to interact with many people and to manipulate a variety of objects in the environment, the young child builds a repertoire of foundational learning experiences. To maximize these crucial experiences, the kindergarten program must focus on realistic objectives, permit ample time for self-directed as well as teacher-directed activities, and provide sufficient manipulative materials for exploration and for enriched dramatic play.

The joint subcommittee found widespread and strong support for the objectives identified in *A Guide for Kindergarten Education* , a publication of the State Department of Education. Also, there is agreement that these objectives are consistent with the needs of young children as they develop cognitively, emotionally, physically, and socially. All who work with or have responsibility for early childhood programs are encouraged to re-examine program goals and objectives to ensure that the implementation of the program adequately reflects a commitment to these objectives.

There is evidence that a school day of at least five hours is necessary to ensure sufficient time for the varying activities essential to the exploratory learner. The part-day kindergarten program limits flexibility and restricts the opportunity to provide for individual needs and abilities. Many who support part-day kindergartens may do so because they have not experienced the advantages of a longer day. During the 1978-79 school year, forty percent of the kindergarten students in the State were enrolled in programs which offered less than a five-hour day. The joint subcommittee recommends that all school divisions implement a full-day kindergarten program and that State Basic Aid to Education provide reduced funding for less than full-day programs.

The kindergarten program which is responsive to learning styles of young children provide a wide variety of manipulative materials for hands-on, enriching experiences. Manipulative materials are the textbooks and workbooks of kindergarten; they are "the means by which a *process* of learning takes place which is indispensible to later, formal learning." (Cohen, 1972) Play is a natural avenue for utilizing materials in learning activities and should be regarded as a viable learning segment in the classroom. The joint subcommittee agrees that "play" should have an important role in the learning process and that school divisions must assure the provision of adequate materials in the kindergarten classroom.

Class-size or pupil-teacher ratio was identified as a critical factor in the implementation of kindergarten programs. Teachers have indicated that large class-size adversely affects their programs. As children are building a foundation of learning experiences at the kindergarten level, it is important that an optimal environment for learning be provided. Small class-size is essential to provide the individual attention and guidance which is required in these crucial early years. Based on information from teachers, research and knowledge of young children, the joint subcommittee concluded that all divisions should strive to implement kindergarten programs which have a maximum class size of 18-20 children with one classroom teacher. Until the optimum class size is realized, the joint subcommittee has concluded that class size for kindergarten must be established with a maximum of 21 students in Average Daily Membership per certified classroom teacher in full-day programs, and a maximum of 40 students in Average Daily Membership per certified classroom teacher in double-shift programs; a full-time aide is essential in double-shift programs.

The joint subcommittee, after careful study, recommends that the age requirements for school entrance remain unchanged. In addition, the joint subcommittee recommends that the provision of counseling sessions for parents of children entering kindergarten be encouraged. Section 22-218.1:1 B. provides flexibility for both the parent and the educator in determining the appropriateness of school entrance for the individual child. Counseling sessions offer excellent opportunities for informing parents of their options and for providing information about the goals of the kindergarten program. Local school divisions are to be commended for the counseling sessions offered these parents and are encouraged to expand these sessions to include parents of all children entering school for the first time.

Teachers are recognized as the key factor in a successful program. The joint subcommittee concurs and suggests that teachers deserve the support of knowledgeable administrators and supervisory personnel. Many decisions which have impact on the kindergarten program are made by persons who lack first-hand experiences in early childhood classrooms or recent and appropriate graduate courses in child development and early childhood education. Current certification requirements for administrative and supervisory personnel fail to recognize the need for competence in this field.

Pressures for academics are evident at the kindergarten level. Such pressures take many forms and come from many sources. Frequently, there is unnecessary pressure to teach a formal and highly structured reading program in kindergarten. The joint subcommittee agrees that some children are ready for reading instruction in the kindergarten; however, there is concern that some teachers lack the appropriate background knowledge essential for the instruction of beginning reading in the early childhood years. Readiness for reading and/or writing requires competence in the basic communication skills of listening and speaking. In talking with teachers, the joint subcommittee determined that teacher preparation programs often do not include courses which adequately emphasize the inclusion of basic communication skills as an aspect of reading readiness, therefore the joint subcommittee recommends that courses in teacher preparation programs be examined to ensure that instruction related to the foundational experiences for reading is included.

The joint subcommittee endorses the concept of basic learning skills but rejects grade level designations which do not allow flexibility in meeting individual needs and abilities. Children develop at different rates. The early childhood years are a period of rapid and uneven growth and wide variance is noted among children of the same age. Very specific and limiting grade level designations are in conflict with what is known about child development. The joint subcommittee urges a de-emphasis of these designations. The stress on accountability has increased the emphasis on test results, exerting pressure to teach academic programs which may be in conflict with children's needs. In spite of recent developments in the area of testing, there are few appropriate test instruments for use with young children. Diagnostic information gained from test results should be one of many criteria used to plan kindergarten programs. Therefore, the joint subcommittee encourages focusing on tests as diagnostic tools.

Piaget has stated that "the younger the child, the more difficult it is to teach him and the more pregnant that teaching is with future consequences."

The joint subcommittee reaffirms its belief that education during the crucial years of early childhood should be spent in an environment which promotes learning through exploration and discovery, which enriches human growth and development, and which provides support for emerging social and emotional maturity. The joint subcommittee is confident that the citizens of the Commonwealth of Virginia are both able and willing to facilitate the provision of this environment.

## PHILOSOPHY

In light of demands of today's society and of the crucial nature of the first years of school, it is imperative that all persons interested in the full development of each child's potential join forces to ensure that (1) appropriate educational opportunities are offered all young children; (2) early educational experiences serve as foundations for learning upon which later learning is built; and (3) the home and school become partners in the educational process.

Citizens of the Commonwealth need educational experiences which will prepare them to cope with the explosion of knowledge and shifting values and needs. Margaret Mead, in describing education's dilemma, wrote:

> "We are now at the point where we must educate people in what nobody knew yesterday and prepare our schools for what no one knows yet, but what some people *must* know tomorrow."

Research documents the crucial nature of the first eight years of life (Appendix C). To support the need for the home and school to become early partners in the education process, there is strong evidence that what happens to the child at home before he enters school affects his attitude toward school and his desire and ability to learn. There is also evidence that inadequate language development during preschool years results in a learning handicap . New insights into learning processes indicate that a five year-old child has greater potential for learning than previously has been recognized. Present-day influences, such as improved infant care, increased opportunities for travel, and the impact of television have enlarged the child's store of information and stimulated his interest in learning.

The goals for appropriate kindergarten education are identical to those of other grades as stated in the Standards of Quality:

> "Whereas, the goals of public education in Virginia are to aid each pupil, consistent with his or her abilities and educational needs, to:
> 1. Develop competence in the basic learning skills,
> 2. Progress on the basis of achievement,
> 3. Qualify for further education or employment,
> 4. Develop ethical standards of behavior and participate in society as a responsible citizen,
> 5. Develop a positive and realistic concept of self and others,
> 6. Endeavor to enhance the beauty of the environment and everyday life,
> 7. Practice sound habits of personal health."

An appropriate kindergarten program focuses on the importance of the child as an individual, and reflects a commitment to a discovery approach to learning. The program emphasizes the importance of the interrelationship of all facets of the child's development: social, physical, intellectual, and emotional. An adequate kindergarten program must provide solid foundations for *all* future development to ensure success throughout the later school years.

Kindergarten is a period in which five-year-olds can deal with their expanding world on their own level and at their own pace. Unpressured by emphasis on academic skills, children may explore surroundings, manipulate a variety of materials, and discover ways of interacting with others in a satisfying manner. Thus, the child expands his learning in a natural way.

The kindergarten curriculum embraces all content areas taught in the elementary school. It is presented not as isolated subject matter, but as experiences that develop concepts, strengthen skills, and lay foundations for future learning.

The kindergarten curriculum reflects the importance of the development of a positive self-concept. How a child feels about self is all-important in determining what that child says, does, and thinks. It seems clear that the self-concept emerges as the child compares himself to other human beings. It is, therefore, extremely important that the kindergarten curriculum be designed around individual needs in order that a positive self-concept can be achieved and sustained from the initial school experience .

Carefully planned opportunities for play are an important aspect of the kindergarten curriculum. Play is a process through which real learning evolves. In play, children develop ideas which they test and evaluate. They organize, classify, recall, associate, choose, reject, and create. Children learn to cope with feelings of fear, anxiety, and helplessness as well as to release tension and excitement.

During play they develop both large and small muscular coordination, refine motor skills, and share experiences.

Continuity of instruction from kindergarten through other primary grades is crucial to ensure that growth and development will benefit from school experiences. Broad objectives are identical at all levels of education, but the methods for achieving the ends are determined by teachers in response to needs of individual children. The study of the joint subcommittee indicates that improved procedures to ensure effective communication and continuous development throughout the grades should be established.

The teacher is the most significant factor in the young child's school experience. He/she must know the children well in order to plan a curriculum which will promote full development for each child. Successful teachers have knowledge and understanding of child development and possess the skills necessary to apply that information in daily work with children. The teacher's personality has a profound influence on each child; therefore, teachers should display personal qualities worthy of imitation by children.

The principal must give leadership to the entire school. Administrative support is essential to the success of kindergarten. The principal's role in successful kindergarten programs involves understanding young children, recognizing needs of the program, valuing its uniqueness, and interpreting it to other professionals and to the community.

As stated earlier, it is basic that home and school, the two institutions most concerned with children, cooperate fully to provide a consistent and supportive environment. A spirit of cooperation, mutual trust, and helpfulness is essential for the benefit of all children.

The success of children's first school experiences is vital to ensuing education and must be a deep-felt concern of both the school and community. The involvement of and support from parents, Boards of Education, community resource persons, and professional staff will lead to greater educational success and well-being for all concerned.

**Report of the**
**JOINT SUBCOMMITTEE ON CERTAIN ASPECTS**
**OF KINDERGARTEN PROGRAMS**
**To**
**The Governor and the General Assembly of Virginia**
**Richmond, Virginia**
**1980**

To: Honorable John N. Dalton, Governor of Virginia

and

The General Assembly of Virginia

In 1977, the General Assembly passed House Joint Resolution No. 146 which requested the Education Committee of the House of Delegates and the Education and Health Committee of the Senate to conduct a study of kindergarten programs in the Commonwealth. The text of House Joint Resolution No. 146 is as follows:

**HOUSE JOINT RESOLUTION NO. 146**

Requesting the House Eduction Committee and the Senate Education and Health Committee to study certain aspects of public school kindergarten programs.

WHEREAS, children of kindergarten age are undergoing rapid developmental changes and differ widely in their individual development patterns; and

WHEREAS, such children are developing attitudes toward self and school and, because of the influence of such attitudes on success in school and later life, it is important that the kindergarten experience have a positive effect; and

WHEREAS, rather than a curriculum based on this concept, the content previously taught in the first grade has become the curriculum in many kindergarten classrooms; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the House Education Committee and the Senate Education and Health Committee are requested to identify kindergarten program objectives and instructional methods which are consistent with the needs and learning styles of young children, to determine the factors which prevent public school kindergartens from achieving the identified program objectives, including class sizes, lengths and scheduling of school days, readiness and maturation levels of children, organizational patterns and teacher responsibilities, and to make such recommendations regarding public school kindergarten programs as they deem appropriate to the nineteen hundred seventy-nine session of the General Assembly.

The Committees may seek the assistance of not more than five citizen members in their study. The Department of Education is requested to cooperate with and assist the Committees with their study.

Pursuant to House Joint Resolution No. 146, the chairmen of the House Education Committee and the Senate Education and Health Committee appointed members of their respective bodies to a joint subcommittee. Five citizen members were also appointed as provided in the resolution. The members were: Delegate Dorothy S. McDiarmid of Vienna; Delegate Alexander B. McMurtrie, Jr. of Midlothian; Delegate Joan S. Jones of Lynchburg; Senator Stanley C. Walker of Norfolk; Senator A. Joe Canada, Jr. of Virginia Beach; Mrs. Caroline Clark of Lynchburg, elementary school principal; Mrs. Janice Mack of Chesterfield, Director of the Virginia Baptist Children's Home; Dr. Alice M. Powell of Hampton, retired professor of early childhood education; Mrs. Jane Ring of Fairfax, kindergarten teacher; and Miss Patty Withrow of Norfolk, supervisor of early childhood education. Senator Omer L. Hirst of Annandale was also appointed to the subcommittee but resigned upon deciding not to seek reelection. Delegate Dorothy S. McDiarmid served as chairman. Mrs. Grey W. Ritchie, Supervisor of Kindergarten, Division of Sciences and Elementary Administration, and Mr. Bernard R. Taylor, Director of the Division of Sciences and Elementary Administration, of the Department of Education assisted the joint subcommittee in its work as provided in the resolution.

As there was not sufficient time to complete the study, the General Assembly requested via House Joint Resolution No. 236 that the joint subcommittee continue its study. The text of House Joint Resolution No. 236 is as follows:

**HOUSE JOINT RESOLUTION NO. 236**

Requesting the House Education Committee and the Senate Education and Health Committee to continue their study of public school kindergarten programs.

WHEREAS, the House Education Committee and the Senate Education and Health Committee were requested by House Joint Resolution No. 146, agreed to in the 1978 session, to study and make recommendations concerning public school kindergarten programs to the 1979 session of the General Assembly; and

WHEREAS, a joint subcommittee with five citizen members was appointed and commenced its study in-depth; and

WHEREAS, the joint subcommittee has had insufficient time to research, compile and consider all the information necessary to this important study; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the House Education Committee and the Senate Education and Health Committee are requested to continue their study as provided in House Joint Resolution No. 146 of the 1978 session and to make such recommendations as they deem appropriate to the nineteen hundred eighty session of the General Assembly.

In continuing the study, the joint subcommittee adopted the Department of Education's suggested Plan for a Response to House Joint Resolution No. 146. The plan enumerated specific questions presented in the resolution. The questions were:

- What are kindergarten program objectives?
- What are learning styles of young children?
- What objectives and instructional methods are consistent with the needs and learning styles of young children?
- What are the factors which prevent public school kindergarten from achieving the identified program objectives, including:

class sizes
lengths and scheduling of school days
readiness and maturation levels of children
organizational patterns
teacher responsibilities

To ascertain information relative to the questions presented in H.J.R. 146, questionnaires were sent to all kindergarten teachers, elementary school administrators, kindergarten contact persons and the presidents of each local Parent and Teachers Association (PTA). In addition, a subcommittee was appointed to conduct a search of the literature on early childhood education to determine what, if any, relationship exists between school success and 1) readiness and maturation levels of children, 2) organizational patterns, 3) class size, and 4) length and scheduling of school days. The members of the subcommittee appointed to conduct the literature search were: Delegate Joan S. Jones, Dr. Michael D. Davis of James Madison University, Dr. Robert Gilstrap of George Mason University, Dr. Joan Isenberg of George Mason University, Dr. Katherine C. Kersey of Old Dominion University, Mrs. Janice Mack, and Dr. Alice M. Powell. The literature search subcommittee was also assisted by materials provided by Dr. Robert L. Banton of Longwood College and Mrs. Lorraine Abernathy of Virginia Commonwealth University.

The list of factors which were believed to affect the success of kindergarten programs was amended by the Literature Search Subcommittee to include the relationship of a positive self-image to school success and the requisite competencies required of kindergarten teachers.

Various areas of investigation were assigned to Dr. Michael D. Davis, Dr. Robert Gilstrap, Dr. Joan Isenberg and Dr. Katherine Kersey. Each engaged graduate students in the search of the literature in the assigned areas. The results of the literature search and the survey conducted by the Department of Education were presented to the joint subcommittee. In addition, Mr. Joseph P.

Roberts, Associate Director for Research and Evaluation of the Department of Education, summarized the reviews of the literature search for the subcommittee.

Though the findings of the literature search are not conclusive, research indicates that there is a relationship of school success to class size, length and scheduling of school days, readiness and maturation levels of children, organizational patterns, and a positive self-image. Research also indicates a relationship between a student's school success and teacher attitudes.

The findings of the literature search were:

1. *Class Size*

Research supports the smaller class as being more beneficial than larger classes for cognitive, academic, social and emotional development. Teacher effectiveness and teacher satisfaction are greater with smaller classes. Students in smaller classes engage in more divergent thinking processes, learn basic skills better and display better behavior and attitudes about teachers, instruction and their peers than do children in larger classes. Though most studies do not indicate a specific class size, studies pertaining solely to kindergarten classes recommend fifteen to eighteen students as an optimal class size. Such studies recommended that classes should not exceed twenty.

2. *Length and Scheduling of the School Day*

Research relating to the length and scheduling of the school day indicates no significant difference in readiness or achievement, two variables which can be easily measured. Full-day programs are possibly better for social and psychological development which are not as easily measured. Research indicates that full-day programs are more advantageous to children's learning than half-day programs because of the increased amount of time spent in the classroom, and that a full-day program provides children with a greater opportunity for learning and development at a crucial time in their lives.

3. *Organizational Patterns*

Research indicates that organizational patterns cannot be clearly identified and defined. Research indicates that the degree of academic achievement based on the organization of the classroom is difficult to measure. However, studies which were reviewed indicated success with all approaches: traditional, "open", skill-oriented, cognitive. The best approach is probably a combination of organizational patterns. Studies also show that when teachers are happy with the program to which they have been assigned, the children are happy and remain learners. The teacher's attitude is crucial to the success of any program.

4. *Readiness and Maturation Levels of Children*

Studies of kindergarten and primary achievement indicate that of the three measurable indices of development, I.Q., chronological age, and mental age, chronological age is the least accurate; mental age the most accurate. Studies which investigated emotional adjustment and continuously high academic achievement favor the child with a higher mental age and chronological age over younger entrants with equally high I.Q.s. Other conclusions drawn from the research are:

a) Children with IQs of 120 and over have a better chance of success in school.

b) Boys have a more difficult time than girls in achieving success in the early school years.

c) Early entrance into first grade results in lower achievement scores.

d) When considering maturational levels, factors other than mental age, such as social, emotional and physical maturity, need to be considered.

e) All children can "succeed" in school if we re-define "success" and make the program flexible enough to provide instruction at the child's own level of development.

5. *Competencies of Kindergarten Teachers*

Competence is defined as the ability to perform or to do a particular task. The nature of competence is "integrative" rather than "additive". Competency is a synthesis, rather than a collection of knowledge, skills, and attitudes. These factors interact with each other to produce facilitative behaviors in the child, and together they provide a basis for identification of those behaviors which make a competent teacher. Competencies can be categorized as knowledge competency, skill competency and attitude competency. These categories encompass five basic skill areas that should be required of a kindergarten teacher. They are child development, classroom management, interpersonal relations, personal competence and program design.

Research also indicates that competent teachers are the central ingredient in the development of quality programs for kindergarten children and are a factor in determining a child's success in school.

6. *Relationship of self-esteem to school success*

Contemporary development in education recognizes the learner's objective and personal evaluation of himself as a dominant influence on his success in school. Contemporary research indicates that there is a relationship between self-esteem and academic achievement. Available research, to a large extent, supports the assumption that "experiences of success" are essential and crucial for optimum development of every human being; that self-concept (self-image) is an index or indicator of a person's feelings of success. Feelings of success build a positive self-image. Success experiences must be real and authentic and, to have their full effect on a person, they must be perceived as success by that person. A person's inner knowledge of success is the foundation of a wholesome and positive self-concept and each success experience enhances the opportunity for future success. A personality built upon an adequate sequence of success experiences is relatively free of the need to harm others or act in a destructive manner. A primary function of the school is to provide opportunities for success to happen. It is believed that supervisors, teachers, administrators and others involved in educational leadership are better able to provide a climate for student success and self-worth when they themselves work well together and experience success.

Traditional concepts of what the education process should be run counter to scientific knowledge of how children develop and learn. Findings show that traditional procedures are not always effective in practice and often are detrimental to a child's learning and adjustment.

The effects of success on learning and behavior can be summarized as follows:

An adequate person tends to perceive man as growing, dynamic, creative, continuously in search of adequacy;

A person's concept or image of himself is an index to his feelings of success or failure. His feelings about himself affect his learning and performance wherever he is. A positive self-image is important in the development of a fully functioning adequate personality;

Adequate persons see themselves as persons of dignity and integrity, of worth and importance. On the other hand, persons who do not feel successful see themselves as unliked.

A great task of the teacher is to help each student gain a positive and realistic image of himself as a learner; and

In building such an image, love and caring are significant to learning and behavior in the same way that success is and must be provided along with success to provide a total environment conducive to human growth. (Appendix E)

As previously mentioned, the plan proposed by the Department of Education and adopted by the joint subcommittee for a response to H.J.R. 146, included a survey of all kindergarten teachers, elementary school administrators, kindergarten contact persons, and P.T.A. presidents.

The purpose of the survey was (1) to identify kindergarten objectives which are accepted by school personnel and parents, (2) to determine factors which prevent public school kindergartens from achieving the objectives, and (3) to gather additional information needed to implement quality kindergarten programs throughout the Commonwealth.

The Department of Education formulated questionnaires which were reviewed and approved by the joint subcommittee. The questionnaires were sent to:

2342 Kindergarten Teachers
975 Principal of schools containing kindergartens
134 Kindergarten Contact Persons
780 PTA Presidents of schools which house kindergarten

Returns were received and processed by the Department of Education. Some returns could not be processed because of the omission of necessary information (e.g. the division name was omitted). Every school division in Virginia contributed to the survey. Usable responses were received from the following:

76% Kindergarten Contact Persons
71.5% Principals
71% Kindergarten Teachers
36.5% PTA Presidents

The results of the survey were printed ( *Kindergarten Study, 1979* ) and distributed to the joint subcommittee, the Education Committee of the House of Delegates and the Senate Education and Health Committee. The summary of the survey results has been excerpted as follows:

*KINDERGARTEN OBJECTIVES*

Identical objective questionnaires were sent to kindergarten teachers, principals, kindergarten contact persons and Parent-Teacher Association presidents. The objectives were taken from *A Guide for Kindergarten Education, 1975* . For every objective stated, two responses were required: (1) Is this an objective in your classroom or school? and (2) Circle according to the degree of importance you believe the objective should have in kindergarten.

The results of the survey clearly indicate that all objectives are accepted as very important or important by a significant percentage of all four responding groups.

Teachers agreed with the stated kindergarten objectives to a significant degree (96.7 percent). Eighty to ninety-two percent said that all stated objectives were objectives of their programs. Principals rated all listed objectives as very important or important by at least ninety percent. They reported that alllisted objectives are contained in their kindergarten programs. Contact persons accepted the objectives to a very high degree (95 percent). Eighty-three percent to ninety-two percent said that all stated objectives were objectives of their programs. Over ninety percent of P.T.A. presidents rated all stated objectives very important or important except for objectives #2 (82.4 percent) and #23 (88.7 percent). Many indicated that they were unsure whether the objectives listed in the questionnaire were to be found in their school programs.

*FACTORS WHICH PREVENT ACHIEVEMENT OF OBJECTIVES*

*Class size*

Teachers reported that a majority of the classes (59 percent) have 20-25 children in both single and double sections. Classes having more than 30 children were reported in both single and double sections. (Two sections: 4 percent - a.m. 3.5 percent - p.m., One section: 3 percent.) (Experience with accreditation reports indicates that the reported figures may be inaccurate because of faulty interpretation of the question.) A large majority of the teachers having fewer than 20 children stated that class size assisted their programs. Teachers with more than 20 children indicated that class size hindered their programs.

From a list of 18 choices, principals reported that smaller pupil-teacher ratio was the third most urgent need of their kindergarten programs. The two greatest needs were (1) communication between kindergarten and first grade and (2) understanding of child development and learning styles of children. From a list identical to the principals, kindergarten contact persons reported that smaller pupil-teacher ratio was the seventh most urgent need.

One third of teachers reporting have no paid aides. Having an aide as much as half time was reported to assist the program. Having an aide less than one half time was reported as having no effect or as a hinderance. Sixty-six percent of classrooms have no volunteer help. Teachers who

have the most volunteer help indicated greatest agreement (97 percent) on its value.

From the list of 18 choices, principals identified aides in the classroom as their eighth most urgent need. Contact persons identified aides in the classroom as their thirteenth most urgent need.

*Lengths and scheduling of school day*

68.5 percent of teachers have one section of children daily. Teachers with one section reported greater satisfaction with their arrangement than teachers with two sections (59 percent to 22.5 percent).

A large majority of teachers (89 percent) reported that they have freedom to schedule their programs to fit the needs of children. Ninety-three percent of those teachers reported that freedom to schedule assists their programs. Further, eighty-eight percent of the teachers who do *not* have freedom to schedule reported that it hinders their program.

*Readiness and maturation levels of children*

Lack of social/emotional maturity was given as second in importance as a reason for kindergarten retention by teachers. They ranked failure to attain kindergarten minimum skills as the most important reason for retention. There was no indication how minimum skills for kindergarten were determined. Principals and contact persons reported that understanding of child development and learning styles of children was one of the three greatest needs of the kindergarten programs.

*Organizational patterns*

A large majority of kindergarten children (80 percent) are in self-contained classrooms. Teachers reported satisfaction with the classroom organization they presently have.

*ADDITIONAL INFORMATION*

*Entrance age date*

Seventy percent of the teachers chose September 30 as the most appropriate cut-off date for entrance to kindergarten. Eighty percent of the teachers agreed that school offers a better learning environment than many children would have otherwise and seventy-three percent agree that children four years and eight months of age can benefit from planned experiences with other children. Sixty-seven percent agree that kindergarten children are often pressured to perform beyond their developmental levels.

September 30 was chosen as the most appropriate date for kindergarten entrance by principals (64 percent), contact persons (64 percent), and P.T.A. presidents (53 percent). December 31 was their second most frequently chosen date.

*School personnel experience*

Over one-half of kindergarten teachers taught kindergarten for the first time in 1978-79. Over one-half (53.2 percent) of the kindergarten teachers have experience teaching at another grade level; eighty percent of that number have taught primary grades.

A large majority of the principals are experienced administrators. They reported that they receive central office assistance with kindergarten programs.

A majority of contact persons have taught in primary and elementary schools and almost one-fourth have taught kindergarten. Many contact persons have taught at more than one level.

*Strengths of kindergarten program*

According to principals and contact persons the two greatest strengths of their kindergarten programs are pupil-teacher interaction and diversified child-centered experiences. A majority of teachers reported that their classroom space is adequate (64.5 percent), their teaching materials are appropriate in quality (87 percent), and adequate in quantity (66 percent).

*Parent involvement*

Two-thirds of the P.T.A. presidents responding say they have not been involved in planning and implementing the kindergarten curriculum. No specific pattern can be drawn concerning, the way parents are involved, degree of interest in greater involvement, and reasons for the lack of involvement.

A majority of teachers (66 percent) reported that they have no volunteer help. Teachers who have available volunteer help on a regular basis reported that this assisted the achievement of their objectives. Conversely, forty-six percent of teachers who had no volunteer help reported that this had no effect on their programs.

Improved communication with parents was reported among the six most urgent needs by both kindergarten contact persons and principals.

*Philosophy of early childhood education*

A large majority of teachers reported that their philosophy of early childhood education is consistent with principals (86 percent), parents (84 percent), other kindergarten teachers (82 percent), central office staff (74 percent), and other primary teachers (72 percent). Teachers reported that a consistent philosophy assisted their programs.

Principals and contact persons reported that a clarified philosophy of early childhood education was their fifth most urgent need. Both groups reported that communication between kindergarten and the first grade was their most urgent need.

*Kindergarten content*

Teachers reported that all listed areas of instruction are included in their kindergarten programs (97 percent - 99.6 percent). 91.5 percent of teachers reported that they have freedom in the use of teaching materials. This freedom assists their programs. In response to the question concerning major influences that determine *what* is taught in kindergarten, both principals and contact persons listed locally developed curriculum guides first and program objectives identified in *A Guide for Kindergarten Education* second. The responses most often written in to this question were (1) needs of individual children and (2) teacher training and preferences. Two-thirds of P.T.A. presidents reported they have not been involved in planning and implementing the kindergarten curriculum. (Appendix F)

Next, the subcommittee visited kindergarten and first grade classes throughout the Commonwealth. Members of both standing Education committees, delegates and senators representing the areas visited, and the chairmen of the Senate Finance Committee and the House Appropriations Committee were all invited to tour with the joint subcommittee. The subcommittee observed in classrooms and talked with students, kindergarten and first grade teachers, elementary school administrators and central office personnel in each school division visited.

The subcommittee visited rural and urban school divisions in three areas of the State. It also visited both full-day and double-shift programs, with various types of organizational patterning and scheduling. In talking with teachers, the subcommittee obtained their perspective of the current kindergarten program relative to program needs, staff needs, their concerns regarding the kindergarten program and success of the program. The most frequent concerns voiced by kindergarten teachers were the need for smaller classes and the problems created with the double-shift. Teachers stressed the need for improved communications between the K-1 grade levels and the need to provide extended readiness experiences in first grade for children who need them.

The subcommittee's work was enhanced by information received from individual representatives of school divisions. Information was offered concerning innovative practices presently being implemented in kindergartens in Virginia.

The joint subcommittee was requested to study certain aspects of the kindergarten program; however, through the course of its study, the subcommittee found that kindergarten is inextricably related to the rest of the primary program and that a child's success in kindergarten colors his perception of and receptivity to learning throughout his school career. In some school divisions,

skills are sequential in kindergarten and first grade, therefore providing continuity.

Data ascertained by the joint subommittee are incorporated in the report and such data reflect the relationship of kindergarten to the primary grades. As such, the joint subcommittee believes that it would be remiss in fulfilling its charge if it failed to address the relationship of kindergarten to first grade and the rest of the primary program.

The subcommittee was diligent in its pursuit of information and carefully considered all information gathered from the Literature Search, the *Kindergarten Study* , observation of existing programs and communications from interested citizens. It is from this data that the Joint Subcommittee on Certain Aspects of Kindergarten Programs offers the following recommendations.

## Recommendations

1. It is recommended that the ratio of 18-20 students in Average Daily Membership to one certified classroom teacher be recognized by the Commonwealth as the optimum kindergarten class size.

Until the optimum class size is realized, it is recommended that the Standards of Quality require that in full-day programs the ratio of students in Average Daily Membership to certified kindergarten classroom teachers be no greater than 21 to 1. In double-shift programs, the certified kindergarten classroom teacher shall have a maximum of 40 students in Average Daily Membership and the assistance of a full-time aide. (Discussion, p. 18)

2. It is recommended that the Standards of Quality require all school divisions to provide full-day kindergarten programs for all eligible children by the 1984-85 school session. (Discussion, p. 20)

3. It is recommended that until all school divisions offer full-day kindergarten programs, State funding be changed to provide reduced funding for less than full-day programs. (Discussion, p. 20)

4. It is recommended that at this time there be no change in the age requirement for school entrance. (Discussion, p. 23)

5. It is recommended that § 22-218.1:1 be amended to facilitate interface of the kindergarten program with the primary program to promote continuous development and successful learning experiences for all students. (Discussion, p. 23)

6. It is recommended that the Department of Education continue to work closely with school divisions in refining and revising counseling sessions for parents of all children entering kindergarten. (Discussion, p. 25)

7. It is recommended that the "Objectives for Kindergarten" in *A Guide for Kindergarten Education, 1975* (Department of Education), be emphasized and adhered to by the school divisions as the basis for kindergarten programs. (Discussion, p. 25)

8. It is recommended that administrative and supervisory personnel with responsibility for early childhood programs have a background of knowledge in the areas of child development and curriculum as required for the NK-3 endorsement.

It is further recommended that such administrative and supervisory personnel seeking certificate renewal have courses required for the NK-3 endorsement. (Discussion, p. 25)

9. It is recommended that public and private colleges and universities with teacher preparation programs offering courses to persons seeking the NK-3 endorsement ensure adequate instruction in the teaching of the communication skills of listening, speaking, writing and beginning reading. (Discussion, p. 26)

10. It is recommended that the on-going implementation of kindergarten programs reflect the value of "play" as an essential factor in the learning and growth process. (Discussion, p. 27)

11. It is recommended that all school divisions provide the variety of equipment and manipulative materials needed for kindergarten programs. (Discussion, p. 28)

12. It is recommended that testing in kindergarten be an on-going process for purposes of diagnosis and instructional planning. (Discussion, p. 29)

13. The joint subcommittee reaffirms a belief in the concept of basic learning skills as a part of the total curriculum.

It is recommended that grade level designations for basic learning skills for grades K-3 be flexible to allow for maturational differences of young children. (Discussion, p. 29)

14. It is recommended that the Department of Education be requested to report to the House Education and Senate Education and Health Committees on the status of the implementation of the above recommendations by November 15, 1981.

## Discussion of Recommendations

1. *It is recommended that the ratio of 18-20 students in Average Daily Membership to one certified classroom teacher be recognized by the Commonwealth as the optimum kindergarten class size.*

*Until the optimum class size is realized, it is recommended that the Standards of Quality require that in full-day programs the ratio of students in Average Daily Membership to certified kindergarten classroom teachers be no greater than 21 to 1. In double-shift programs, the certified kindergarten classroom teacher shall have a maximum of 40 students in Average Daily Membership and the assistance of a full-time aide.*

The early years in school are the most important in the education of children. It is during these years that the foundation for successful school experiences is both broadened and strengthened. It is essential that an optimal environment for learning be provided for these crucial years.

The joint subcomittee, after careful study, has concluded that the pupil-teacher ratio is a critical factor in providing an optimal learning environment. As members met with kindergarten teachers and school administrators in the school divisions visited, concern was expressed regarding class size. Teachers expressed confidence that they "could do a better job with fewer children." Classes observed ranged in size from 19 to 29.

The *Kindergarten Study* , January, 1979 gives further evidence that class size is considered a factor which affects program implementation. Fifty-three percent of kindergarten teachers responding indicated that class size of twenty or more hinders the implementation of the program.

| Effect/ Number Children | No Response | No Effect | Assists | Hinders | Total Number |
|---|---|---|---|---|---|
| Under 20 | 5% (15) | 7% (20) | 85% (239) | 2.5% (7) | 281 |
| 20-25 | 9% (61) | 15% (101) | 19% (127) | 57% (380) | 669 |
| 26-30 | 5% (8) | 3% (4) | 1% (2) | 90.5% (134) | 148 |
| Over 30 | 5% (2) | 8% (3) | 13.5% (5) | 73% (27) | 37 |
| Total Number | 86 | 128 | 373 | 548 | 1135 |

Elementary principals also indicated that a high priority should be given to reducing pupil-teacher ratio. From a list of 18 choices, principals reported that a smaller pupil-teacher ratio was the third most urgent need of their kindergarten programs. ( *Kindergarten Study* , 1979).

Many teachers wrote in statements about class size which expressed the intensity of their concern. For example:

"Class load affects my teaching more than anything else."

"All aspects involved in this questionnaire are important, but I see class size as one of the most significant (20 is ideal)."

"Also classes should be 20 students to achieve objectives. Each child over 20 seems like many more."

"Twenty should be the limit in a classroom where there is no paid aide."

"There should be no more than 20 children in a kindergarten room!!!"

"I feel that having more than 20 children (4-5 years old) in any one class is extremely detrimental to the group as a whole."

"Smaller class sizes would assist the teachers in giving adequate attention to each child."

The search of the literature provides additional support for establishing a lower pupil-teacher ratio. Studies which deal with kindergarten recommend a maximum class size of twenty pupils with fifteen to eighteen pupils as optimal. Class size affects cognitive development, academic development, social development, teacher effectiveness, and teacher satisfaction. In all areas, smaller class size is more beneficial than larger class size. After extensive research and study, Dr. Martin Olson formulated nine generalizations relative to class size; these are incorporated in the following sections.

The young child is an involved learner. He explores his environment; he manipulates the contents of his environment; he experiments and evaluates his discoveries. Piaget gives emphasis to the need for exploratory and discovery activities to ensure adequate stimulation for cognitive development.

I. Teachers employ a wider variety of instructional strategies, methods and learning activities and are more effective with them when they work with fewer rather than more students.

II. Students benefit from more individualized instruction when teachers work with fewer rather than more students.

III. Students engage in more creative and divergent thinking processes when teachers work with fewer rather than more students.

The foundation of experiences and knowledge for academic development is strengthened and broadened in the early childhood classroom. The young child requires individual attention and guidance in the learning process. Opportunities are needed for frequent interaction to enrich language for expressing ideas and experiences as well as to offer challenges for new understandings. Selection of learning activities must be based on knowledge of the learner's needs and abilities; the teacher is alert for each indication of readiness for new skills and information .

II. Students benefit from more individualized instruction when teachers work with fewer rather than more students.

VI. Students learn the basic skills better and master subject matter content when teachers work with fewer rather than more students.

The early childhood years are a time of accelerated expansion of the social environment. The young child is growing in responsibility for living in the social world and learning to work cooperatively in small and increasingly larger groups. With supervision, behavior patterns necessary for responding to others in acceptable ways are acquired; early development of positive behavior patterns reduces discipline problems in later grades. The young child needs a social environment which fosters the development of individual potential and which offers an atmosphere of emotional support.

IV. Students learn how to function more effectively as members and leaders of groups of varying sizes and purposes when teachers work with fewer rather than more students.

V. Students develop better relations with, and have greater interpersonal regard for, other students and other teachers when teachers work with fewer rather than more teachers.

VII. Classroom management and discipline are better when teachers work with fewer rather than more students.

The teacher of the young child is responsible for planning and implementing the appropriate learning activities to meet the developmental needs of rapidly changing students. Through interaction and observation the specific needs of children are determined. Adequate diagnosis and preparation of individualized learning materials are essential. Guiding the learning experiences of young children

requires constant supervision and direction on the part of the effective teacher.

II. Students benefit from more individualized instruction when teachers work with fewer rather than with more students.

VII. Classroom management and discipline are better when teachers work with fewer rather than with more students.

IX. Student attitudes and perceptions are more positive when teachers work with fewer rather than more students.

The young child needs an enthusiastic and dedicated teacher who gains satisfaction and a sense of achievement from involvement with young children.

VIII. Teacher attitude and morale are more positive when teachers work with fewer rather than more students.

There is little doubt that, all things being equal, more can be achieved in smaller classes.

2. *It is recommended that the Standards of Quality require all school divisions to provide full-day kindergarten programs for all eligible children by the 1984-85 school session.*

3. *It is recommended that until all divisions offer full-day kindergarten programs. State funding be changed to provide reduced funding for less than full-day programs.*

After visiting both half-day and full-day programs and after carefully studying information from many sources, the joint subcommittee concluded that all Virginia children should be offered full-day kindergarten programs. Full-day programs are needed to implement instructional programs which: (1) are responsive to strengths and needs of children; (2) are an integral part of the total school program; and (3) involve parents in the education of their children. Many classrooms have become available throughout the Commonwealth because of completed building projects and declining school enrollment. A sufficient number of certified kindergarten teachers is available to supply personnel needs. The above recommendations are based on the advantages of full-day programs and the ability of counties and cities of the Commonwealth to provide such programs.

The Commonwealth of Virginia currently has full-day and half-day kindergarten programs. Standards of Quality require that each school division shall provide a kindergarten program of at least one-half day for all eligible children. Board of Education regulations state that the daily kindergarten program must be at least three hours exclusive of meal intermissions. With the exception of one division, all three-hour programs have double shifts of children; one group attends in the morning and another group in the afternoon. For the purpose of this report, it will be assumed that divisions having three hour programs have double shifts of children. The following chart shows the number of children and school divisions which provided full-day or half-day programs during the 1978-79 school year.

| Length of Day | No. Divisions | No. Children |
|---|---|---|
| Half Day | 38 | 27,900 |
| Full Day | 98 | 35,891 |

Department of Education School File 1978-79

*Background*

In 1966, the General Assembly of Virginia enacted legislation providing State support for kindergarten beginning in 1968. The State Board of Education recommended that the minimum length of the kindergarten day be five hours including lunch. It was required that school divisions desiring a shorter day justify their need in terms of lack of space and show plans for eliminating the shorter day. The implication of this recommendation was that the kindergarten should be considered an integral part of the total school program.

In 1971, the Board of Education allowed divisions to have a three-hour kindergarten day exclusive of intermissions for a period of four years beginning July 1, 1972. This action was taken to accelerate the implementation of kindergarten programs throughout the State.

In 1974, the State Board of Education extended three-hour kindergarten programs indefinitely, and restated its support for the full day. The Board's resolution read:

> With the view of further promoting the establishment of kindergarten programs for all eligible pupils by all school divisions and in recognition of capital outlay needs for additional facilities, the Board of Education hereby extends, for the time being, the three-hour day exclusive of intermissions as an exception to its five-hour day requirement. In extending this exception, the Board, at the same time, restates its support of the five-hour day for the full implementation of the program, as presented in its curriculum guide, for the maximum benefit of kindergarten children.

In December 1976, the Board of Education restated a commitment to a full-day kindergarten program and clarified the meaning of half-day. *The Board's Regulation on Length of School Day* states:

> The daily program for kindergarten shall be at least three hours, not including meal intermissions. The student day herein described shall be considered a minimum day rather than an optimum day; a longer student day is encouraged to accommodate the instructional program and student needs.

*Concerns Over Length of Kindergarten Day*

The joint subcommittee heard many concerns over the length of the kindergarten day. Concerns were expressed through a Department of Education survey, at public hearings, through personal correspondence, from a search of the literature on early childhood education, and from teachers, administrators, parents, college and university personnel.

The *Kindergarten Study* (1979) compiled by the Department of Education indicated that teachers with one section of children daily reported greater satisfaction with their arrangement than did teachers with two sections (59 percent to 22.5 percent). Many teachers wrote comments which showed the intensity of their feeling. "What wonderful things could happen if we had a longer day!" is a typical remark. Other remarks showed a belief in a shorter day, such as, "The day is too long for kindergarten children" or "Five hours would be ideal." Many teachers inserted comments opposing back to back sessions. (Appendix G)

Studies reviewed for the subcommittee's literature search showed no significant difference in test scores between children attending half-day and full-day kindergarten programs. Additional findings indicate that: (1) teachers find working with two groups of children daily physically and mentally exhausting; (2) parents favor a full-day program; and (3) many important features are eliminated in half-day programs. (Appendix E)

Although diverse opinions were expressed during public hearings, it is the consensus of the subcommittee that greater satisfaction was expressed from divisions having full-day programs than those with half-day programs.

*Reasons for Three-Hour Kindergarten Programs*

The reasons most often cited for three-hour kindergarten programs include:

*The difficulty of providing proper housing for full-day programs.* Some divisions have been unable to cope with housing for the school population. Special problems have occured in divisions having many old buildings. By having two shifts, twice as many children could be accommodated in existing classroom space.

*School personnel and/or parents believe the full-day is too long for five-year-old children.* Lengthy bus rides complicate the problem.

*State funding to school divisions is computed on average daily membership* . Average daily

membership for kindergarten is the same as any other grade regardless of for the length of the school day.

*Some persons believe that kindergarten objectives can be accomplished as well in half-day as full-day* . On some tests, academic scores did not appear to be affected by length of day.

*Reasons for Full-Day Kindergarten*

Reasons most often cited for the full-day include advantages for the child, the teacher and the administrator.

The full day:

*Gives teachers opportunity to discover strengths and problems early in the child's school experience* . Kindergarten children should be carefully observed to detect intellectual, physical, emotional and behavioral difficulties in order to begin appropriate intervention as soon as possible. A teacher having one group of children for a full-day has more time to observe and evaluate than does a teacher with two groups of children for a shortened day.

*Allows time for many learning experiences to be offered while proceeding at the child's learning pace* . A full-day cuts down on hurrying children, thus offering opportunities for success, which is basic to self-concept.

*Allows time for enriching experiences* such as field trips, art and music activities, visits from parents or community helpers.

*Provides children additional instructional time* to talk about experiences, to solve problems, to organize ideas, and to arrive at conclusions.

*Allows children opportunities to explore basic concepts and skills in depth* .

*Permits children's interests to be sustained from one day to the next* . Children may leave on-going projects without risk of interference from other groups.

*Provides time for nutritious lunch* which is needed by many children.

*Provides teachers more time for out-of-class activities* .

Full-day programs provide teachers with work periods before the children arrive and after they leave. The teacher's time without the children is vital for:

- planning curriculum
- preparation of learning activities
- recording children's progress
- conferring with parents

*Enhances the probability of interface of the kindergarten with the rest of the primary school* . Full-day programs allow kindergarten teachers to participate in school functions and to cooperate with other primary teachers for instructional planning.

*Simplifies grade placement of children* . In cases when children need another year of kindergarten-type experiences, an additional year of half-day programs may not be a viable alternative.

*Eliminates certain problems caused by double shifts* . Examples of problems encountered are cleaning between groups of children, overlap of children arriving and leaving, lunch and break time for teachers, scheduling make-up days.

*Type of Program*

The type of program presented in kindergarten must be considered when deciding on the desired length of day. A highly structured, teacher-centered program may best be accomplished in a shortened day. The length of the school day influences the degree to which a program can be flexible. The part-day program limits flexibility. The teacher, restricted by the pressures of time, often provides a series of structured activities because there is not enough time to offer the wide variety of activities needed to meet individual needs and abilities. In a full day program , the teacher has greater opportunity 1) to foster children's creativity, an increasingly important characteristic for the twenty-first century, 2) to observe and diagnose student development and 3) to vary learning activities. The full day program is more responsive to students' developmental needs and can ensure that periods of rest or quiet activity are interspersed among those that require vigorous involvement. A full-day is needed if the program is activity oriented, embraces all content areas, and includes attention to social, physical, emotional, and intellectual development as envisioned in *A Guide for Kindergarten Education,* (Department of Education, 1975).

State basic aid to education is based on Average Daily Membership (ADM) with no differentiation for full-day and half-day kindergarten programs. The subcommittee agrees that this creates an inequity in the financing of kindergarten programs across the Commonwealth. There is no incentive for school divisions which provide half-day programs to implement the full-day programs. The subcommittee strongly urges that necessary changes be made to encourage all school divisions to offer full-day kindergarten programs.

4. *It is recommended that at this time there be no change in the age requirement for school entrance.*

The subcommittee agrees that age is only one factor which must be considered in determining the appropriateness of school entrance. The *Kindergarten Study* (January, 1979) indicated that though a large percentage of respondents would prefer a cut-off date of five by September 30, the larger percentage agree that children four years eight months of age can benefit from planned experiences in a school setting.

Discussions with teachers and administrators across the Commonwealth reveal that most kindergarten teachers believe a kindergarten program which is responsive to the varying maturation levels of children can be implemented.

The search of the literature indicates that (1) earlier is not necessarily better, (2) children with a high I.Q. have a better chance of success in school, (3) early entrance into first grade results in lower achievement scores, (4) factors other than mental age should be weighed when considering maturation levels, and (5) that all children could succeed in school if "success" were redefined and programs were made sufficiently flexible to provide instruction at each child's developmental level. The subcommittee agrees strongly that attention should focus on the latter, adapting programs to meet the needs and abilities of each child, regardless of chronological age, mental age or sex.

Problems related to school entrance age most frequently are concerned with the inability of the learner to perform specific tasks at a certain level of expectation. Too often failure to perform results in a label of "immature" or "too young." Any classroom has a broad range of maturational levels among children. There is a need to diagnose adequately the child's developmental characteristics in order to prescribe appropriate learning experiences. Program flexibility, both in content and in implementation, is essential to assure success of the learner.

Any criteria which may be established for school entrance are arbitrary at best and cannot be agreed upon by everyone, parents or educators. As the program must be flexible, so must there be some degree of flexibility in setting requirements for school entrance.

The law as presently written does provide flexibility for both the parent and the educator in the decision-making process. Furthermore, it assigns responsibility to the parent for the process without abdication by the school. It provides a base of mutual understanding as parent and school cooperate in deciding on an appropriate placement for the child. It is anticipated that with time and experience, schools will become increasingly articulate in explaining early childhood programs, parents will have greater understanding of the kindergarten years, and teachers will implement instructional activities which emphasize what the learner can accomplish.

5. *It is recommended that § 22-218.1:1 be amended to facilitate interface of the kindergarten*

*program with the primary program to promote continuous development and successful learning experiences for all students.*

Kindergarten is an integral part of the educational continuum of the early childhood years which encompass ages four through eight. For many children, kindergarten has replaced first grade as the initial contact with a formal instructional program. As such, it is essential that the kindergarten provide rich experiences which enhance later learnings rather than adopt the content of the first or primary grades.

The lack of continuity of instruction from kindergarten to first grade has been identified as the greatest need of the kindergarten program by principals and kindergarten contact persons ( *Kindergarten Study* 1979, Appendix F). After observing in various systems throughout the State and talking with school personnel, the subcommittee concurred that the need exists and concluded that efforts should be directed toward continuous learning experiences from one level to another. The recommended change will permit improved continuity of instruction across grade levels, consistent with identified needs.

Continuous progress is defined as providing instruction based on individual needs and abilities in an environment which is both stimulating and rewarding; it does not preclude a student's need to spend more or less time at specific points along the continuum. Rather, it means that the curriculum reflects sensitivity to the needs of children and the commitment to ultimate goals to be attained. Continuous progress means that the instructional program will be built on the child's previous experiences and abilities as well as the objectives of the curriculum.

Educators concerned with the early school years should mutually develop and agree upon the content of the educational continuum. Defining this continuum offers the opportunity to establish learning objectives within a flexible but realistic time-frame. Top priority must be given to establishing and maintaining purposeful communication throughout the educational system. Educators must have a sound understanding of the educational continuum as well as knowledge of the most appropriate instructional environment for achieving the stated objective.

The urgency of continuity of instruction over grade levels has been stressed by virtually all curriculum planners for more than a generation.

Results of many research studies have concluded that the lasting effects of kindergarten programs depend on the degree to which teachers in subsequent grades build upon skills and concepts learned in kindergarten.

Alternative organizational patterns such as team-teaching, multi-age classes and cross-grade groupings offer appropriate means for promoting continuity in the early grades. The subcommittee found that the most prevalent organization for kindergartens is the self-contained class. Team teaching with two or more teachers working together is utilized to a lesser degree. No organizational pattern can be identified as most successful and teachers generally expressed satisfaction with their current patterns. However, school divisions can respond to organizational problems by implementing combinations of patterns, encouraging flexibility through experimentation and, most importantly, by focusing on goals which have long term rather than immediate results.

Traditionally the kindergarten has emphasized development of the "whole" child with a balance of experiences to promote cognitive, emotional, physical and social growth. Such programs are developmentally-oriented rather than academically-oriented. Results of the Perry Preschool Project, conducted in Ypsilanti, Michigan over a ten year period, support the concept that the successful program is one which is responsive to developmental needs.

For most children successful school experiences can be provided by proceeding as expected from one grade level to the other. Teachers of each succeeding level should learn as much as possible about a child's previous experiences and provide the next needed step.

Variations in the instructional programs may be needed to ensure successful experiences for some children. The following variations in programs in Virginia were explained to the subcommittee:

All children in a division are screened early in the kindergarten year for learning problems. Children are placed in special programs for a part of the day.

– A transitional grade between kindergarten and first is provided for children who need additional learning activities.

– One teacher teaches the same children for both kindergarten and first grade thus giving children a two year period uninterrupted by a teacher change.

Certain first grade children are allowed to spend a part of the day in kindergarten; certain kindergarten children are allowed to spend a part of the day in first grade.

6. *It is recommended that the Department of Education continue to work closely with school divisions in refining and revising counseling sessions for parents of all children entering kindergarten.*

The subcommittee agrees that parents should be fully cognizant of the options they have relative to school entrance and understands that in some instances, a one year delay of entrance into school may be advisable - for example, in cases of children who must make long bus rides or who are maturing slowly. Having knowledge of their children and their circumstances, parents can decide after counseling whether to enroll their child or wait a year. Under present State law, children as young as four years and eight months of age may enter kindergarten. It was the intent of § 22-218.1:1 B. to ensure that parents of children whose fifth birthday occurs between September 30 and December 31 become aware of the options available to them and the expected impact of their decisions.

Section B. of § 22-218.1:1 places the responsibility for parent counseling on the school. Section C. requires that the Superintendent of Public Instruction assist school divisions. It states that:

> The Superintendent of Public Instruction shall disseminate to the school divisions information concerning the advisability of school attendance by children between the ages prescribed in subsection A. of this section concerning ages when children are required or eligible to attend school. (§ 22-218.1:1 C.)

The subcommittee commends local school divisions and the State Department of Education for efforts made to counsel parents of designated children. The subcommittee also recommends that counseling for parents of designated children be refined and continued, and that consideration be given to offering counseling to parents of all children entering school for the first time.

7. *It is recommended that the "Objectives for Kindergarten, in A Guide for Kindergarten Education, 1975 (Department of Education), be emphasized and adhered to by the school divisions as the basis for kindergarten programs.*

The subcommittee agrees that *A Guide for Kindergarten Education* (State Department of Education, 1975) sets forth objectives which are appropriate to the developmental needs of young children as well as basic to a sound educational program. (Appendix D) The *Kindergarten Study* (State Department of Education, 1979) gives evidence that kindergarten teachers, elementary principals, kindergarten contact persons, and Parent-Teacher Association presidents accept these objectives as having significant importance in the kindergarten classroom. The subcommittee suggests that each school division be encouraged to review these objectives and to determine the extent to which the kindergarten program focuses on the implementation of these objectives.

It is essential that kindergarten programs pursue objectives in each of the developmental areas. The program must assist each child in achieving to the maximum intellectually, socially, emotionally, and physically. Broad objectives provide the necessary foundation and flexibility for planning the specific learning experiences offered in the kindergarten classroom. However, the teacher has the responsibility of ensuring that each child participates in a variety of learning experiences reflecting a balanced set of objectives.

8. *It is recommended that administrative and supervisory personnel with responsibility for early childhood programs have a background of knowledge and experiences in the areas of child development and curriculum as required for the NK-3 endorsement. It is further recommended that such administrative and supervisory personnel seeking certificate renewal have courses required for the NK-3 endorsement.*

The subcommittee agrees that programs encompassing kindergarten through grade three would be strengthened and enhanced by the support of administrative and supervisory personnel who are knowledgeable in early childhood education. It is essential that certification requirements be reviewed and revised to ensure that administrators, including elementary principals, and supervisors who have responsibility for these grades have broad knowledge of child development theory, curriculum in early childhood and classroom management techniques. Such knowledge would be enriched by participation in early childhood classrooms, i.e. teaching experiences.

Young children need and deserve programs which are planned and implemented by persons who have both practical and theoretical knowledge of child development and the implications for curriculum. Young children are eager and involved learners; they require learning activities which stress hand-on experiences. The early childhood grades (N-K-3) must be responsive to the learning styles of the children served.

While it is the classroom teacher who has the primary responsibility for implementing the instructional program, major decisions which affect the program are made by administrative and supervisory personnel. Such decisions determine the quality of programs offered. With a thorough understanding of child development and curriculum in early childhood education, these decision-makers will promote and provide support for an optimal learning environment for young children.

9. *It is recommended that public and private colleges and universities with teacher preparation programs offering courses to persons seeking the NK-3 endorsement ensure adequate instruction in the teaching of the communication skills of listening, speaking, writing and beginning reading.*

There is perhaps no topic which creates more controversy than the teaching of reading in kindergarten. The subcommittee agrees that a primary focus in the kindergarten program is development of communication skills – listening, speaking, reading and writing. A concern of the subcommittee is adequate preparation of teachers for this responsibility.

Certification requirements for the kindergarten endorsement require a minimum of six semester hours in courses related to the teaching of reading. Such courses usually emphasize the translation of printed symbols into language and related skills. Early childhood teachers need an understanding of the foundational skills and concepts which promote reading readiness and must be aware of the signs of readiness. These teachers need an understanding of reading in its broadest sense, as all language related activities. The early childhood teacher needs to emphasize language development and its relation to the reading process. "A child's language is the raw material for reading. Language both expresses and shapes thought as a child grows in controlling the symbols used in communications with others." (Robinson, 1977) The teacher must have knowledge of instructional activities which are appropriate for children who are reading.

Delores Durkin, who has studied the effects of teaching young children, advocates methods courses in reading specifically designed for teachers of nursery school, kindergarten and first grade. Such courses would emphasize strengthening the quality of the language of the child and developing an enriched vocabulary. Courses should provide teachers with the knowledge needed to assess the child's strengths. Courses which focus on beginning reading stress alternative approaches to reading activities and give the teacher a sense of confidence in exploring the teaching of reading.

> Young children who acquire good listening skills and who demonstrate strong oral language development are likely to have very little difficulty in acquiring the skills necessary to be successful readers. And, much more often than not, it is the good readers who are the better writers of both personal and practical composition. (Strickland, 1978)

A joint statement giving concerns and recommendations relative to reading and pre-first grade was developed recently by seven national professional education organizations (Appendix J). The first recommendation stresses the importance of a broad communication process in teaching of reading in pre-first grade classrooms. It is as follows:

> Provide reading experiences as an integral part of the broader communication process that includes listening, speaking, and writing. A language experience approach is an example of such integration. (American Association of Elementary, Kindergarten and Nursery Educators)

10. *It is recommended that the on-going implementation of kindergarten programs reflect the value of "play" as an essential factor in the learning and growth process.*

Many people have viewed work and play as opposites. Work has been seen as good and profitable and play as frivolous; children supposedly learn through work and not through play. Thus, play is viewed as the content of learning rather than the means through which learning evolves. Although this viewpoint has emerged in many levels of society, it has no foundation in education or psychology.

Play for the young child is re-creation, the opportunity for exploring and manipulating his environment and for testing and evaluating his understandings and concepts of the world around him. Through play the child grows in his understanding of self, his abilities and his limitations. He learns from and about others, developing attitudes and values.

However, increased emphasis on accountability for reaching certain academic objectives has caused many educators to provide less time for play in kindergarten classrooms. There has been a lack of commitment among educators and parents alike to the crucial value of play in the learning/growth process. Often, emphasis on content areas has caused downgrading or even abandonment of play in early childhood classrooms.

The concept of play as a necessary learning medium and responsibility of the school for this medium needs to be redefined.

"When a child learns through play, the learning becomes internalized and remains a part of his being." (Lindberg and Swedlow, 1976) Through play the young child acquires those experiences which build the foundation for later learnings and which are essential in concept development. Play provides an opportunity for repetition in a meaningful way. Play is recognized in the State Kindergarten Guide as important to the kindergarten program.

In play the child develops ideas which can be tested and evaluated. He organizes, classifies, recalls, associates, chooses, rejects, and creates. He copes with feelings of fear, anxiety, and helplessness. He releases anger or tension and expresses joy in play. He develops muscles and refines motor skills. He measures himself against his peers, evaluates his own areas of competence, and achieves a more realistic concent of himself. ( *A Guide to Kindergarten Programs* , 1978)

The value of play has been stressed by many psychologists and educators. The following represent many which could be cited:

Play is the way the child learns what no one can teach him. It is the way he explores and orients himself to the actual world of space and time, of things, animals, structures and people.... Play is the child's work. (Frank, 1957)

A child's play is his way of exploring and experimenting while he builds up relations with the world and with himself. In play he is learning to learn. He is also discovering how to come to terms with the world, to cope with life's tasks, to master skills. In particular he is learning how to gain confidence. In play a child is continually discovering himself anew. (Scarfe, 1966)

Play is the basis of all higher forms of mental activity, because it serves as a bridge between sensory motor intelligence and operational thought. In his play, the child progresses from ritualization of an action to new levels of abstraction which form the basis for all forms of symbolic representation: language, concepts, associations, principles, and theories. Through play, the child learns to understand the world on his own terms and to have some control over it to meet his own cognitive needs. Play is where the intellect, the emotions, and the will join forces to carry the child forward to new levels of coping with his expanding world. (Athey, 1974)

When shared with others, play is a major vehicle for constructive socialization, widening empathy with others and lessening egocentrism. (Arnaud, 1971)

Brian Sutton-Smith, Head of the Program in Development and Learning, Teachers College, Columbia University, warned educators on the dangers of failing to prepare children for life through play.

As the modern world seems to be excessively confusing and complex in its problems and demands, it would seem that any education system that did not maximize a child's play capacities is guiding nim down a blind alley. Any education system that lets a child go forth with play deficits leaves him ill equipped for that which lies ahead. (Sutton-Smith, 1975)

Effective use of play in the kindergarten program requires the involvement of a knowledgeable teacher who is aware of the purposes in children's play and protects their right to learn through play. Such a teacher values spontaneous play and becomes involved in play situations to maximize potential learning. The teacher's role in play is one of facilitator, stage-setter, planner, catalyst, and listener. The teacher finds opportunities during play to (1) provide appropriate language and vocabulary, (2) supply essential information, (3) clarify misconceptions, (4) suggest additional activities, (5) extend understandings, and (6) assess the developmental progress and needs of children.

Effective use of play requires commitment of knowledgeable administrators as well as teachers. Administrators' support is necessary to ensure that needed time, space and equipment are available. Administrators must assist teachers in explaining that well-planned opportunities for play in no way inhibit the learning of reading readiness, language, and mathematics but expand understanding in these and other areas. In an era when the volume of content to be taught is overwhelming and when the demands of society for cost effectiveness and accountability are ever present, it is essential that all involved in the education of young children be prepared to defend children's need to play.

11. *It is recommended that all school divisions provide the variety of equipment and manipulative materials needed for kindergarten programs.*

The subcommittee is concerned that all school divisions in the Commonwealth are not providing adequate manipulative materials for kindergarten/early childhood programs. The textbooks of kindergarten are manipulative materials. *Standards for Accrediting Schools in Virginia* (Department of Education, 1978) provides as follows:

> Each school shall have budgeted and expended for instructional materials and supplies, not including basal texts and library materials, an annual appropriation of at least $2.50 per student based on Average Daily Membership.

The standard fails to recognize that manipulative and other instructional materials are the tools of learning for the young child.

Appropriate materials include such major items as blocks, workbench with tools for woodworking, doll-play accessories, and housekeeping furniture (play stove, sink, refrigerator). Additional manipulative materials are required - puzzles, games, beads, counters, scales, water play materials, dress-up clothes, puppets, toy cars and trucks, to name a few. Basic equipment and accessories for simple cooking experiences should be available for classroom use. As the young child selects from and utilizes these materials, concepts and skills are enriched. (Appendix K)

The young child is an active, involved learner – one who learns by touching, by seeing, by hearing, by tasting, by communicating ideas and sharing information. The classroom environment must provide the raw materials necessary for exploration, experimentation, and discovery. Access to a variety of materials and opportunities to explore freely promote the "hands-on" experiences essential for building the foundation for emerging abstract understanding.

Textbooks, workbooks and programmed materials do not offer the needed variety of flexibility in implementing kindergarten programs based on the needs of young children. Workbooks often require coordination skills and/or cognitive skills beyond the developmental level of most kindergarten-age children. These materials emphasize passive learning experiences, failing to recognize the young child's need for active participation. Such materials often become the program and the result is a weak program which fails to be responsive to individual differences.

> Teachers who provide a variety of material for experimentation and manipulation, who extend to children opportunities to acquire information and understanding about their world of people and things, and who provide opportunities and means for children to solve problems, to experiment and to correct and extend concepts are fulfilling their role of fostering sound intellectual

development. (Wann, Dorn, Liddle, 1962)

12. *It is recommended that testing in kindergarten be an on-going process for purposes of diagnosis and instructional planning.*

The subcommittee recognizes and supports the role of testing in diagnosing the needs and abilities of young children with the resulting information utilized in planning and implementing the instructional program. Individual test instruments can provide only limited information about specific areas of child development and do not offer an assessment of all developmental areas.

When test results are utilized for evaluation or placement purposes only, the content of the tests tends to become the primary focus of the curriculum. The child's progress is measured in terms of cognitive skills; social, emotional and physical development frequently are given little or no consideration. Reliance on testing programs as a basis for determining instructional placement undermines the value of the teacher's professional judgment and may contribute to a lowering of teacher self-esteem.

Any testing program must be supplemental to systematic teacher observation of the child in the context of the instructional environment. Observations assist in determining strengths and weaknesses resulting from uneven progress in the developmental areas. For example, a child may excel in reading but lack the motor coordination necessary to write at a comparable instructional level. Teacher observation has proven to be a most reliable method of assessing developmental progress, including intellectual growth.

An effective testing program emphasizes diagnosis - determining instructional or developmental needs of individuals and groups. Components of the comprehensive program include both formal and informal testing situations, utilization of individual and group test instruments, and incorporation of observation techniques.

13. *The joint subcommittee reaffirms a belief in the concept of basic learning skills as a part of the total curriculum.*

*It is recommended that grade level designations for basic learning skills for grades K-3 be flexible to allow for maturational differences of young children.*

The subcommittee reaffirms the concept of basic learning skills but is concerned that such skills may tend to limit the scope of the curriculum in early childhood education. The subcommittee agrees that specific grade-level designations for skills is a further limiting factor and that the Basic Learning Skills Program would be strengthened by the designation of grade spans, such as K-2, 1-3, K-3.

Basic skills for the kindergarten child must encompass all areas of development. Motor skills such as buttoning a jacket or cutting with scissors must be included; oral language skills and vocabulary enrichment are prerequisites for reading. The stress on accountability for basic skills encourages teaching only the content which is easily evaluated by traditional testing instruments. It is indeed unfortunate that the emphasis on evaluation tends to limit our vision in promoting programs of excellence for young children.

Emphasis on basic learning skills tends to stress content rather than application of learning. Rote learning of facts does not ensure that the child will integrate the information into his own conceptual system. Basic skills all too easily can set the limits for instruction; while they are defined as minimum expectations, they frequently become the total program. One may become so concerned with basic skills that the broader objectives of education are neglected or even ignored. Basic skills have value only within the context of broad objectives; it is imperative that this be recognized in early childhood education. Kindergarten receives its share of pressure to teach basics; if care is not taken in defining these basics, the critical learning experiences of the early years will be destroyed.

## Conclusion

The joint subcommittee believes that the kindergarten program is an integral and essential part of the education continuum. It would be quite difficult to duplicate the benefits children receive

from a good kindergarten program by any other means.

The Commonwealth is fortunate in having enlightened and devoted educators with whom the subcommittee had the opportunity to work. Therefore, the State must do all that is possible to support their efforts. Some school divisions in the State have initiated innovative practices to meet the individual needs of children. The subcommittee believes that all school divisions should be encouraged to utilize a variety of instructional strategies in order that children's needs may be served.

The subcommittee believes that schools should initiate efforts to promote positive self concepts at the earliest possible level and should consistently maintain these efforts throughout each child's school experience.

The subcommittee has determined that legislation is required to implement some of its recommendations. Therefore, proposed legislation has been appended to this report.

The subcommittee is appreciative of the assistance of all persons who contributed to this study.

Respectfully submitted,*

Dorothy S. McDiarmid, Chairman
Caroline Clark
Joan S. Jones
Janice Mack
Alice M. Powell
Jane Ring
Stanley C. Walker
Patty Withrow

* Mr. McMurtrie took no action on this report. Senator Canada dissents. His statement is as follows:

## DISSENTING STATEMENT OF SENATOR CANADA

I want to thank all the members of the committee for their diligence and for the many hours they have put in on this very worthwhile study.

The report represents a great deal of work on the part of many; however, there are some aspects of their findings which I cannot agree with.

I disagree with the findings of the committee as to whether we should recommend that all school divisions implement a full-day kindergarten program and that the State Basic Aid to Education should provide for reduced funding for less than full day programs.

The research on full day as opposed to half-day kindergarten shows no significant difference in readiness and achievement for full day programs. Readiness would seem to include all aspects of a child's development, and "getting ready" for school which is the purpose of kindergarten. Also, the research deals in contradictory statements stating no difference in readiness and achievement, but a difference in development and learning. The terms seem synonomous.

Studies reviewed for the subcommitte's literature search showed no significant difference in test scores between children attending half-day and full day kindergarten programs. (page 40 - line 16).

Some persons believe that kindergarten objectives can be accomplished as well in half-day as full day. On some tests, academic scores did not appear to be affected by the length of the day. (Page 41 - line 16).

Kindergarten teachers cited a lack of social and emotional maturity as an important factor in kindergarten retention. Keeping youngsters who lack maturation in these areas in a structured full day situation will not increase their social and emotional maturity. While opportunities for social and emotional interaction may aid children on their development, the rate/level of maturation is an individual process, and I question whether more time spent in a given situation insures more

maturation growth.

I do not believe there is sufficient evidence to show that full day kindergartens will benefit and be of significance to our youngsters and it would greatly increase costs.

I would also like to point out that many of the Virginia divisions currently having half-day programs are some of the largest divisions and are often cited as educational leaders in the state. (Example: Fairfax County, Virginia Beach, Arlington, Chesterfield County, Henrico, Prince William, Chesapeake, Hampton, Newport News, etc.) I think this is a significant point.

All educators believe, and I believe our subcommittee concurs, that flexibility is essential in meeting the instructional needs of children. Therefore, I think it is educationally sound to allow the school systems some flexibility, without penalty, in best meeting the needs of the students in their communities. Unless it is determined that a school system is not providing an adequate kindergarten program for all of its students, then I don't believe we should require a full day kindergarten program.

Several references are made to the report about offering instructions at the level of the youngest child. It seems that the more immature child could cope with a half-day session much better than a full day session because of the attention rate and the other factors that are normally present in an immature child.

For these reasons, and others, I dissent from the Committee's position on full day kindergarten.

Respectfully submitted,

A. Joe Canada, Jr.

## Footnotes

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# Appendices

## Appendix A

### Legislation

A BILL to amend and reenact § 22-218.1:1 of the Code of Virginia so as to require plans for certain kindergarten programs to provide for interface between the kindergarten and primary programs.

Be it enacted by the General Assembly of Virginia:

1. That § 22-218.1:1 of the Code of Virginia is amended and reenacted as follows:

§ 22-218.1:1. Kindergarten programs; who may attend; duty of State Superintendent and school divisions to disseminate information.—A. Each school board shall establish and maintain a kindergarten program suitable for children who will reach their fifth birthday after September thirtieth and on or before December thirty-first of the school year. The school board's plan for such program shall be acceptable to the Board of Education and shall include the following:

1. A statement of purpose and objectives of the kindergarten program that reflects consideration of the different readiness and maturity levels of children in the program;

2. A description of the organization, scheduling and staffing of the program that reflects a responsiveness to the needs of the children of the age span to be served in the program;

3. Evidence that the program plan was developed by a committee that included early childhood specialists, parents, teachers and administrators;

4. Scheduling and an agenda of in-service activities for kindergarten teachers to insure adequate preparation for the program;

5. A plan for the interface of the kindergarten program with the primary program to allow for continuous progress ~~within the kindergarten program until such time as the children meet basic entry level~~ expectations ~~for the primary program~~ ;

6. A description of the counseling program required by subsection B of this section.

B. A parent or guardian enrolling any child who will reach the age of five after September thirtieth and on or before December thirty-first of the school year in a kindergarten program provided for in subsection A of this section shall be counseled by the school division concerning the advisability of such child attending school. Upon request of the parent or guardian after such counseling, the child shall be admitted to the kindergarten program without payment of tuition if the child resides in the school division offering the program and shall be included in the average daily membership of the school division.

C. The Superintendent of Public Instruction shall disseminate to the school divisions information concerning the advisability of school attendance by children between the ages prescribed in subsection A of this section and concerning ages when children are required or eligible to attend school. Each school division shall disseminate such information to parents of children of such ages upon or prior to enrollment of such children in the public schools of the division.

A BILL to revise the standards of quality for the several school divisions for the 1980-1982 biennium and to repeal Chapter 529 of the Acts of Assembly of 1978 and Chapter 535 of the Acts of Assembly of 1979, relating to the standards of quality for the several school divisions.

Whereas, Section 2 of Article VIII of the Constitution of Virginia provides that standards of quality for the several school divisions shall be determined and prescribed from time to time by the Board of Education, subject to revision only by the General Assembly; and

Whereas, the goals of public education in Virginia are to aid each pupil, consistent with his or her abilities and educational needs, to:

1. develop competence in the basic learning skills,

2. progress on the basis of achievement,

3. qualify for further education and/or employment,

4. develop ethical standards of behavior and participate in society as a responsible family member and citizen,

5. develop a positive and realistic concept of self and others,

6. enhance the beauty of the environment and respond to aesthetic experiences,

7. practice sound habits of safe living and personal health; and

Whereas, the Board of Education has prescribed such standards for the 1980-1982 biennium and it is now the desire of the General Assembly that such standards be revised; now, therefore,

Be it enacted by the General Assembly of Virginia:

1. *1. The standards of quality for the school divisions in the Commonwealth for the 1980-1981 biennium shall be:*

*Standard 1. Basic Skills*

*A. The General Assembly and the Board of Education believe that the fundamental goal of the public schools of this Commonwealth must be to enable each student to acquire in the elementary grades a mastery of certain basic skills necessary for success in school and for a productive life in the years beyond. Therefore, each school division shall give the highest priority in elementary and secondary school instructional programs to developing, to the best of each student's ability, the basic learning skills. There shall be concentrated effort in the primary grades (kindergarten through grade three) and intermediate grades (four through six). Remedial work shall begin for low-achieving students at all grade levels upon identification of their needs.*

*B. The program of instruction in primary and intermediate grades in each school division shall include the statewide minimum skills objectives in reading, communications (with emphasis on writing, grammar, listening and speaking), and mathematics skills which are appropriate for each child and which should be achieved or exceeded in the primary and intermediate grades.*

*C. The program of instruction in grades seven through twelve shall include activities to assist students to maintain the basic skills and to develop at least minimum competence in the following areas:*

*1. Reading, writing, and speaking,*

*2. Mathematics concepts and computations,*

*3. Essential skills and concepts of citizenship, including knowledge of history and government, necessary for responsible participation in American society and within the world community,*

*4. Knowledge and skills to qualify for further education and/or employment.*

*Special emphasis shall be given to instructional activities which improve the reading, writing, speaking, and mathematics skills of students.*

### *Standard 2. Testing and Measurement*

*A. Each school division shall administer tests primarily to provide the classroom teacher with information to help in assessing the educational needs of individual students. For grades 1 through 6 such testing shall include, at least annually, the administration of criterion-referenced tests developed or approved by the Department of Education to measure the progress of each student toward achieving the educational objectives established under Standard 1-B.*

*B. Each school division shall administer annually normative tests for the purpose of assessing the educational progress of selected groups of students. The Department of Education shall develop or select such tests, provide scoring services, and determine the students to be tested.*

*C. In order to receive a diploma from a public high school a student shall earn the units of credit prescribed by the Board of Education and attain minimum competence in the areas established under Standard 1-C.*

*Attainment of reading and mathematics competencies established under Standard 1-C shall be demonstrated by means of tests prescribed by the Board of Education. Attainment of competencies in the other areas established under Standard 1-C shall be demonstrated to the satisfaction of local authorities through performance-related assessment as part of the instructional program, such as observation, evaluation of students' records, appraisal of students' success in completing specified activities, various other means apart from formalized testing, or through a test if preferred by a locality.*

### *Standard 3. Kindergarten Programs*

*Each school division shall provide a kindergarten program for all eligible children. Until the 1984-85 school year, each school division's kindergarten program shall be at least one-half day. In the 1984-1985 school year and thereafter each school division's kindergarten program shall be a full-day program.*

### *Standard 4. Career Preparation*

*The General Assembly and the Board of Education believe that the ultimate goal of public education must be to enable each student, upon leaving school, to continue successfully a program of advanced education and/or to enter the world of work. Therefore, each school division shall provide programs acceptable to the Board of Education that offer:*

*A. Career guidance to all secondary students, including students with disabilities,*

*B. Academic and vocational preparation for students who plan to continue their education beyond high school,*

*C. Vocational education to the end that no student graduates or drops out of school before having an opportunity to become prepared to enter the world of work.*

### *Standard 5. Education of Handicapped Students*

*Each school division shall have a program, acceptable to the Board of Education and consistent with State and federal laws, for early identification of students who may need special education. After handicapping conditions have been identified and individualized education programs have been specified, such students shall be provided, at public expense, with appropriate instruction acceptable to the Board of Education.*

*Standard 6. Education of Gifted and Talented Students*

*A. Each school division shall develop procedures to identify gifted and talented students in accordance with guidelines of the Board of Education.*

*B. Each school division shall offer differentiated instructional opportunities acceptable to the Board of Education for identified gifted and/or talented students to stimulate the development of their innate abilities.*

*C. Students who participate in post-secondary programs before graduating from high school, whether academic or vocational, shall be awarded appropriate course credit and/or high school diplomas upon satisfactory completion of the advanced instruction in accordance with regulations prescribed by the Board of Education.*

*Standard 7. Alternative Education*

*A. Each school division shall offer educational alternatives acceptable to the Board of Education, including but not limited to programs for the handicapped, vocational education programs and programs for gifted and talented students. Such alternatives shall provide educational choices which appropriately meet the needs of students who have varying interests and abilities and which assist them in achieving the knowledge, skills, and attitudes stated in the goals of public education in Virginia.*

*B. Students enrolled in alternative education programs conducted by school divisions shall be counted in average daily membership (ADM) in accordance with regulations of the Board of Education.*

*Standard 8. Responsible Student Conduct*

*Public education should be conducted in an atmosphere conducive to learning, free of disruption and threat to person or property, and supportive of individual rights. Therefore, each school division shall:*

*A. Assist students to achieve self-direction and to become responsible citizens,*

*B. Require students to abide by standards for conduct and attendance which have been developed in each locality through the involvement of students, parents, teachers, administrators, and school board members.*

*Standard 9. Personnel*

*A. Each school division shall employ with State and local basic, special education, and vocational education funds a minimum of 54 certified instructional personnel (full-time equivalent) for each 1,000 students in average daily membership; 48 of such full-time equivalent instructional positions shall be funded from basic school aid.*

*B. Each kindergarten classroom in each school division having a full-day kindergarten program shall have no more than 21 students in average daily membership per certified classroom teacher. Each kindergarten classroom in each school division having a one-half day kindergarten program shall have no more than 40 students in average daily membership per certified classroom teacher and shall have a full-time teacher's aide assigned to the classroom. In the 1984-1985 school year and thereafter, each kindergarten classroom in each school division shall have no more than 20 students in average daily membership per certified classroom teacher.*

*C. Certified instructional personnel employed by a school division shall be assigned in such a way as to result in a ratio of pupils in ADM to full-time equivalent teaching positions in grades 1-6 which is no greater than 21 to 1 (excluding special education teachers).*

*D. To assist low-achieving students in the primary grades, school divisions with 25 percent or*

*more of their fourth-grade students one or more years below grade level shall assign additional instructional personnel to grades K-3. For this purpose, eligible school divisions shall receive basic aid funding to support 50 full-time equivalent instructional positions for each 1,000 students in average daily membership during the 1980-1982 biennium.*

*The Board of Education shall monitor the expected improvement in achievement of students in school divisions which qualify for additional State funds under this provision.*

*Ξ. To assist low-achieving eighth- and/or ninth-grade students, school divisions shall assign additional personnel to assist those who are identified as being three or more years below grade level. State funding in addition to basic aid shall be provided for this purpose and shall be distributed on the basis of the number of students needing additional help.*

*The Board of Education shall monitor the expected improvement in achievement of students in school divisions which qualify for additional State funds under this provision.*

### *Standard 10. Staff Preparation and Development*

*A. Every teacher applying for initial certification after July 1, 1980, shall take a professional teacher's examination prescribed by the Board of Education.*

*B. Starting with the 1981-82 school year, one certification requirement for persons beginning teaching careers shall be successful completion of an undergraduate program which includes an introduction to the elementary or secondary school environment. Such introduction shall provide a period of extensive supervised classroom experience in accordance with rules and regulations developed by the Board of Education. This experience shall be in addition to the probationary period for beginning teachers.*

*C. The holder of a Collegiate Professional or Postgraduate Professional Certificate shall be required to have that certificate renewed every five years. The Board of Education shall establish criteria for certificate renewal, including requirements for formal study and demonstrated acceptable performance during the prior period of certification.*

*D. Each school division shall provide a program of professional development for instructional personnel. This program shall be designed to help all personnel increase proficiency in performing assigned responsibilities.*

### *Standard 11. Accreditation and School Evaluation*

*Each school division shall develop by July 1 of the next school year a plan acceptable to the Board of Education to meet such accrediting standards as are specified by the Board of Education. The chairman and members of any visiting committee conducting an evaluation as part of the accreditation process shall be independent of the school division and shall be selected by the Superintendent of Public Instruction. All accreditation reports shall be open for public inspection.*

### *Standard 12. Planning and Public Involvement*

*Each school division shall involve the staff and community in revising and extending biennially a six-year school improvement plan. This plan shall be reviewed and approved by the local school board and submitted by January 15 of each odd-numbered year to the Superintendent of Public Instruction for approval by the Board of Education. This plan shall include:*

*A. The measurable objectives of the school division,*

*B. An assessment of the extent to which the objectives are being achieved, including follow-up studies of former students,*

*C. A forecast of enrollment changes and a plan for managing those changes,*

*D. A program for strengthening the skills of school principals to perform the leadership duties specified in*

*Standard 14,*

*E. An evaluation of the appropriateness of certain regional services, in cooperation with neighboring divisions, and a plan for implementing such regional services when appropriate,*

*F. Strategies for achieving the objectives of the school division,*

*G. Evidence of community participation in the development of the six-year plan.*

*A report on the extent to which the measurable objectives were achieved during the previous school year shall be made by November 1 of each year to the local school board and to the public. Deviations from the plan shall be explained.*

*Standard 13. Policy Manual*

*Each school division shall maintain and follow an up-to-date policy manual which shall include, but not be limited to:*

*A. A procedure for local implementation of the grievance procedure prescribed by the General Assembly and Board of Education,*

*B. A system of two-way communication between employees and the local school board and its administrative staff, based on guidelines established or approved by the Board of Education, whereby matters of concern can be discussed in an orderly and constructive manner,*

*C. A cooperatively developed procedure for personnel evaluation appropriate to tasks performed by those being evaluated,*

*D. A policy for the selection and evaluation of all instructional materials purchased by the school division, with clear procedures for handling challenged controversial materials.*

*An up-to-date copy of the school division policy manual shall be kept in the library of each school in that division and shall be available to employees and to the public.*

*Standard 14. Individual School Management*

*Each school division shall hold individual school principals responsible for acceptable performance of essential managerial and instructional leadership duties, in accordance with State and local policies and regulations, including the following:*

*A. Preparation and implementation of an annual school plan with community and staff involvement which is consistent with the divisionwide six-year plan required by Standard 12 and which is approved by the division superintendent,*

*B. Development of a school handbook of policies and procedures which is consistent with division policies and which implements them,*

*C. Provision of a stimulating learning environment and an efficient and effective operation through the coordination of services of all persons who work in the school,*

*D. Assignment of pupils and teachers to classes, programs, and activities designed to promote maximum learning,*

E . *Provision for the use of available instructional materials and equipment which allow learning experiences compatible with the educational needs of pupils,*

*F. Evaluation of the effectiveness of the instructional program in each classroom and in the*

*school as a whole,*

*G. Working with teachers in the development of mutually agreed upon instructional objectives,*

*H. Supervision of teachers and supporting them in providing an effective instructional program and a classroom free from disruption,*

*I. Appraisal of the performance of teachers and other employees.*

*The appraisal of the performance of principals required by Standard 13 shall include an evaluation of the extent to which these duties and others specified locally have been fulfilled.*

*Standard 15. Classroom Planning and Management*

*Each school division shall hold individual teachers responsible for acceptable performance of instructional duties, in accordance with State and local policies and regulations, including the following:*

*A. Teaching which is influenced by an understanding of each child's strengths, weaknesses, and needs as well as by the home and community characteristics,*

*B. Teaching which provides for individual differences among students,*

*C. Teaching which makes the best use of available instructional materials and other resources appropriate to students' needs,*

*D. Teaching which provides both opportunity and incentive for every student to develop essential basic skills, specific concepts, and solutions to meaningful problems,*

*E. Teaching which exhibits and encourages attitudes of mutual respect and courtesy,*

*F. Teaching which is based on specific instructional objectives mutually agreed upon with principals,*

*G. Teaching which produces gains in pupil performance,*

*H. Teaching which involves students in planning and other active classroom participation,*

*I. Classroom management which maintains organized and purposeful activity,*

*J. Classroom management which establishes standards of acceptable behavior,*

*K. Classroom management which provides an attractive and stimulating environment for learning, and*

*L. Personal performance which rewards achievement and creates a favorable psychological environment for learning.*

*The appraisal of teacher performance required by Standard 13 shall include an evaluation of the extent to which these duties and others specified locally have been fulfilled.*

*§ 2. The standards of quality prescribed above shall be the only standards of quality required by Section 2 of Article VIII of the Constitution of Virginia.*

*§ 3. School divisions providing programs and services, as provided in the standards of quality prescribed above, with State basic and local funds may be required to provide such services and programs only to an extent proportionate to the funding therefor provided by the General Assembly.*

*§ 4. Notwithstanding any other provision of law, the Board of Education shall have authority to seek school division compliance with the foregoing standards of quality. When the Board of*

*Education determines that a school division has failed or refused, and continues to fail or refuse, to comply wtih any such standard, the Board shall notify the Attorney General. It shall be the duty of the Attorney General to file, in the name of the Board of Education in the circuit court having jurisdiction in the school division, a petition for a writ of mandamus directing and requiring compliance with such standards by the appropriate party or parties defendant.*

2. That Chapter 529 of the Acts of Assembly of 1978 and Chapter 535 of the Acts of Assembly of 1979 are repealed.

**HOUSE JOINT RESOLUTION NO.....**

Requesting the Department of Education to report on the implementation of the recommendations of a legislative study on kindergarten programs.

WHEREAS, the joint subcommittee appointed to study certain aspects of kindergarten programs pursuant to House Joint Resolution No. 146, adopted in 1977, and House Joint Resolution No. 236, adopted in 1978, made the following recommendations in its report to this 1980 session of the General Assembly:

1. That the ratio of 18-20 students in Average Daily Membership to one certified classroom teacher be recognized by the Commonwealth as the optimum kindergarten class size and that, until the optimum class size is realized, the Standards of Quality require that in full-day programs the ratio of students in Average Daily Membership to certified kindergarten classroom teachers be no greater than 21 to 1 and in double-shift programs, the certified kindergarten classroom teacher shall have a maximum of 40 students in Average Daily Membership and the assistance of a full-time aide.

2. That the Standards of Quality require all school divisions to provide full-day kindergarten programs for all eligible children by the 1984-85 school session.

3. That until all school divisions offer full-day kindergarten programs, State funding be changed to provide reduced funding for less than full-day programs.

4. That the Department of Education continue to work closely with school divisions in refining and revising counseling sessions for parents of all children entering kindergarten.

5. That the "Objectives for Kindergarten" in *A Guide for Kindergarten Education, 1975* (Department of Education), be emphasized and adhered to by the school divisions as the basis for kindergarten programs.

6. That administrative and supervisory personnel with responsibility for early childhood programs have a background of knowledge in the areas of child development and curriculum as required for the NK-3 endorsement, and that such administrative and supervisory personnel seeking certificate renewal have courses required for the NK-3 endorsement.

7. That the on-going implementation of kindergarten programs reflect the value of "play" as an essential factor in the learning and growth process.

8. That all school divisions provide the variety of equipment and manipulative materials needed for kindergarten programs.

9. That testing in kindergarten be an on-going process for purposes of diagnosis and instructional planning.

10. That grade level designations for basic learning skills for grades K-3 be flexible to allow for maturational differences of young children.

WHEREAS, it is important that the General Assembly be apprised of the degree to which these recommendations are implemented; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Department of Education is requested to report to the House Education Committee and the Senate Education and Health Committee on or before November 15, 1981, on the status of the implementation of the recommendations quoted herein that were incorporated into legislation or for which no legislation was needed.

**HOUSE JOINT RESOLUTION NO.....**

Requesting the Board of Education to review certain regulations with a view to requiring certain administrative and supervisory personnel to have the background required for the NK-3 endorsement.

WHEREAS, many decisions affecting the quality of school programs for children in kindergarten through grade three are made by administrative and supervisory personnel; and

WHEREAS, a thorough understanding of child development, early childhood curriculum and classroom management techniques would improve the ability of administrative and supervisory personnel to strengthen and enhance public school programs in kindergarten through grade 3; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Board of Education is requested to review its regulations prescribing qualifications for administrative, supervisory and related instructional positions with a view toward requiring that administrative and supervisory personnel with responsibility for kindergarten through grade three have a background of knowledge in the areas of child development and curriculum as required for the NK-3 endorsement. The Board is requested to consider applying this requirement to administrative and supervisory personnel already endorsed as such who are seeking to renew or revive their certificates as well as to persons seeking initial endorsement.

**HOUSE JOINT RESOLUTION NO.....**

Requesting each institution of higher education in the Commonwealth with a teacher preparation program to review and assess its courses on the teaching of reading and language arts.

WHEREAS, a primary focus in kindergarten is the development of the communication skills of listening, speaking, writing and beginning reading; and

WHEREAS, early childhood teachers need an understanding of the foundational skills and concepts necessary to reading readiness, of all language related activities and of language development and its relation to the reading process to be adequately prepared to teach children to read or to be ready to learn to read; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That each institution of higher education in the Commonwealth with a teacher preparation program offering courses to persons seeking the NK-3 endorsement is requested to review its courses for such persons related to the teaching of reading and language arts so as to assess whether the courses prepare its students to teach adequately the communication skills of listening, speaking, writing and beginning reading. Each such institution is requested to submit a report on its review and assessment to the House Education Committee and the Senate Education and Health Committee no later than November 15, 1981.

RESOLVED FURTHER, That the Clerk of the House of Delegates is directed to send a copy of this resolution to each such institution.

# APPENDIX B

## APPENDIX B

## DEFINITION OF TERMS

Counseling sessions: refers to counseling of parents of certain children as required by school law § 22-218.1:1 B., Code of Virginia.

*Developmental: pertaining to, or characteristic of, the process of development; a general term applied to many types of age, growth, or maturation, such as mental, anatomical, physiological, educational or social.

Double shift kindergarten: refers to programs where the teacher has two groups of children per day. One group attends in the morning and the other in the afternoon.

*Early childhood education: usually refers to the program and curriculum for children in nursery school, kindergarten, and/or primary grades 1 through 3.

*Kindergarten: an educational setup or section of a school system devoted to the education of small children, usually from 4 to 6 years of age: characterized by organized play activities having socializing values, by opportunities for self-expression and training in how to work together harmoniously, and by an environment, materials, curriculum and program carefully selected to provide for child growth and development.

Manipulative materials: refers to objects, toys, materials or equipment provided to promote learning in a constructive, exploratory manner.

*Play: any pleasurable activity carried on for its own sake, without reference to ulterior purpose or future satisfaction.

*Reading readiness: attainment of levels of interest, experience, maturity, and skills which enable the learner to engage successfully in a given task; often used to indicate the preparedness of a child for beginning formal reading instruction.

* Good, Carter v. ed. Dictionary of Education. New York: McGraw-Hill Book Company, 1973

# APPENDIX C

## APPENDIX C

## STATEMENT OF RESEARCH IN EARLY CHILDHOOD EDUCATION WITH IMPLICATIONS FOR KINDERGARTEN

An increasing body of educational, psychological, and medical research documents the crucial nature of the first eight years of life. Action research and everyday interaction with children support the lasting effects caused by the experiences of the first few years of life. The purpose of this statement is to outline some of the most significant results of research in the fields of psychology and education and to show how effective kindergarten education enhances the development of children.

Much research has been reported which stresses the importance of a variety of experiences to the growth of intelligence. Hunt has shown through many experiments that intellect is not static but is affected by an individual's experiences. (Hunt, 1961). The quality of experiences of the young child has a profound impact on intellectual growth.

Hunt concluded that how well a child can use his thinking skills to generalize in a variety of situations is, to a great degree, determined while the child is young. It is based on the quality of experiences of the child at an early age. (Hunt, 1964). He stresses the need to provide enrichment activities that are matched to the child's developmental level.

Piaget states that the intellect proceeds from one step to another as the child has experiences with his/her world. Furfillment of each stage is necessary before proceeding to the next. (Piaget, 1967) (Kamii, 1967) (Flayell, 1963). Each stage of development carries opportunity for acquisition of new abilities and unless these abilities are sufficiently exercised, they will not develop fully. Although the rate of development

from one stage to the other is largely based on maturation, the full development of each stage is influenced by the experiences of the former stage. (Bloom, 1964) (Deutsch, 1964) (Hunt, 1964).

Learning is an active, seeking process. It is a natural process for young children; however, it can be encouraged or thwarted by forces in the environment. (Hunt, 1966) (Deutsch, 1964). After studies with three, four, and five-year-old children, Wann reported that children are ready for challenging intellectual experiences. (Wann, 1962). According to Bruner, children are able to learn many concepts and skills formerly reserved for later years if the ideas are presented in a manner which is right for young children. (Bruner, 1962).

Deutsch and others emphasize that the longer children are deprived of certain key environmental features the more pronounced will be the adverse effect on children. These environmental features include expectation for the child's achievement; encouragement of the child in the exploration of his/her world in a variety of situations; nature of rewards for learning tasks well done; and aspirations for the child's future. (Deutsch, 1967).

The acquisition of language and communication is crucial to education. The studies of Bereiter and Engleman have stated that children who enter school with poor language understanding must be given help in the form of many verbal experiences in order to sucessfully perform in the school setting. (Bereiter and Engleman, 1966). Loban, in a longitudial study of kindergarten children, found a positive relationship between high achievers and the children who had large vocabularies and used words freely. (Loban, 1963). Piaget believes that as language competency develops, this language directs thinking. (Piaget, 1951).

Most young children are individualists. One of the most important developmental tasks is to learn to work and play with other boys and girls. (Leeper, 1974). The kindergarten experience is often the first opportunity many children have to interact with other children. Young children are ready for group living and are concerned about friendships and family living, neighbors, and neighborhoods. (Wann, 1962).

The child of five is in the developmental stage of self indentify. The child needs to know who he/she is, what he/she can do and how well he/she is doing. This becomes for him either his drive to succeed, or conversely the force which thwarts motivation. (McCandless, 1961).

Young children are very sensitive and failure affects their self-image deeply. A poor self-image caused by constant experience with failure and pressure is not easily reversed. Research has shown that what a child thinks of himself and his ability has greater influence on his actual accomplishments than his I.Q. (Frost, 1968).

Creative abilities can be enccuraged if opportunities for aesthetic expression are provided and the results accepted. Society seems to cause many children to decline in creativity at about age five. (Torrence, 1963). There is a positive relationship between creativity and a child's view of himself, his identification with others, and his openness to new experiences. (Combs, 1962).

Many conclusions could be drawn from research, however, for the purpose of this paper only the following are suggested:

- Early education gives maximum probability to the occurence of broad general experiences for all children. Early experiences

promote the development of understandings and the emergence of the intellect from one level to another.

- Early experiences of children are crucial to their emotional and intellectual development. The school cannot substitute for home experiences nor would there be a desire to do so. Kindergarten teachers working in cooperation with the home have an opportunity to contribute to the present as well as future success of the child.
- The first year of school should help every child to develop a positive self image. To accomplish this each child must have opportunities to discover his/her assets and abilities and to be successful in a variety of experiences.
- Kindergarten teachers may be among the most influential educational persons in a child's life. Attitudes and concepts developed in the first year of school are long lasting and influence future experiences.
- Teaching kindergarten is a very complex and demanding task. It requires a knowledge of each child; an understanding of characteristics of young children; skill in planning a learning environment based on children and their needs; and the ability to explain the curriculum to parents and others.

In light of the above, it is imperative that all persons interested in the maximum development of children join forces to ensure that (1) early educational opportunities are offered all young children; (2) these early foundations of learning are built upon in subsequent years; (3) the curriculum is carefully evaluated in light of needs and developmental stages of children; and (4) the home and school become partners in the education of their children.

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APPENDIX D

# II. Objectives

Broad objectives for kindergarten education guide the teacher in formulating specific objectives for children. A balanced kindergarten program will further the emotional, social, mental, and physical development of each young child. As a result of planned experiences with concrete objects and interaction with peers and well-qualified adults, each child may:

GROW EMOTIONALLY AND DEMONSTRATE GROWTH BY:

- Discovering self; likes, dislikes, attitudes, strengths, needs, and limitations
- Expressing thoughts and feelings.
- Developing a feeling of security.
- Facing problems and attempting to solve them.
- Becoming more self-directed.
- Seeking new experiences.
- Persisting in efforts.
- Exhibiting a strong desire to learn.
- Realizing others are sources of help.
- Showing concern for living things.
- Assuming responsibility.
- Increasing confidence in self.

GROW SOCIALLY AND DEMONSTRATE GROWTH BY:

- Cooperating with individuals and groups.
- Sharing and taking turns.
- Developing respect for the rights and feelings of others.
- Participating in class activities.
- Solving social problems without resorting to force.
- Understanding the effect of behavior on an individual and the group.
- Giving and accepting criticism.
- Assuming leadership.
- Appreciating differences among people.
- Accepting limits involved with living in a democracy.

GROW IN ABILITY TO COMMUNICATE AND DEMONSTRATE GROWTH BY:

- Talking and listening to children and adults.
- Expressing needs, feelings, and desires.
- Asking simple how, what, and why questions.
- Gaining satisfaction in expressing ideas orally.
- Telling an experience or a story in sequence.
- Retelling stories.
- Dictating original stories and poems.
- Expressing self through art and music.
- Participating in dramatic play.
- Following simple oral directions.

GROW PHYSICALLY AND DEMONSTRATE GROWTH BY:

- Developing muscular control and coordination.
- Participating in a balanced program of activity and relaxation.
- Developing a sense of balance.
- Identifying body parts.
- Practicing good nutritional habits.
- Maintaining good posture.
- Recognizing safety hazards.
- Using equipment safely.
- Observing safety rules.

GROW AESTHETICALLY AND DEMONSTRATE GROWTH BY:

- Experimenting with paints, crayons, clay, and other art media.
- Enjoying the expression of thoughts and feelings through art forms.
- Increasing awareness and appreciation of color, design, form, rhythm, and sound.
- Telling about personal art experiences.
- Singing simple songs and recognizing melodies.
- Developing a sense of rhythm.
- Appreciating beauty and understanding its contribution to daily life.
- Becoming aware of and appreciating contributions of various individuals and cultures.

GROW INTELLECTUALLY AND DEMONSTRATE GROWTH BY:

- Developing concepts.
- Beginning to observe, inquire, infer, predict, and draw conclusions.
- Striving to solve problems.
- Expressing curiosity about the environment.
- Grouping objects on basis of likeness or usage.
- Evidencing pleasure in discovery.
- Becoming aware of the natural environment.
- Recognizing familiar objects as models of real objects.
- Realizing that books and words have meaning.
- Developing visual discrimination.
- Learning to discriminate rhythms, sounds, and origin of sounds.
- Identifying various tastes and odors.
- Identifying objects and their properties by touch.
- Becoming aware of left-right progression.

- Becoming aware of the concept of position.
- Enjoying a variety of stories and poems including nursery rhymes.
- Beginning to understand the difference between reality and fantasy.
- Becoming aware of alphabet names and sounds.
- Understanding the variety of roles people in the home, school, and community play.
- Learning about various holidays and festivals.
- Beginning to understand the use of economics in everyday life.
- Ordering objects.
- Beginning to recognize, compare, and construct sets.
- Understanding one-to-one relationships.
- Beginning to recognize sizes, shapes, and patterns.
- Becoming familiar with numerals.
- Using numbers in everyday work and play.

Source: A Guide for Kindergarten, Department of Education, 1975.

APPENDIX E

# A Study of the Relationship of Kindergarten Class Size, Length and Scheduling of the Kindergarten Day and Teacher Self-Concept to School Success

Prepared for the Joint Subcommittee on
Certain Aspects of Kindergarten Programs

by

Tamyra L. Beckner
Connie H. Harner
Barbara M. Kipps
Deborah M. Kipps
Marlene S. McCullough
Susan J. Trippe
Margaret Z. Williams
Elsie H. Wilson

Under the Direction of
Michael D. Davis, Ph.D.
Assistant Professor of Early Childhood Education
James Madison University

December 15, 1978

Section 1 of Appendix E

# INTRODUCTION

The purpose of this study was an examination of some of the variables that may be influential in determining the success of children during their kindergarten year and beyond. Variables studied were the length and scheduling of the school day, class size and teacher self-concept. Teacher self-concept was subsumed under the other two variables after it became apparent that class size and length of day had a direct effect on teacher self-concept.

This study was done by eight graduate students at the masters level enrolled in a graduate course, Trends and Issues in Early Childhood Education, at James Madison University. This study was directed by the course instructor who served as facilitator-problem solver-editor.

Initially, a search of the pertinent literature was undertaken. The students searched the Education Index, Dissertation Abstracts and the ERIC Microfilm collection for articles related to the selected variables. In addition, a computer search from the North Carolina Science and Technology Research Center, insured that relevant materials were not missed.

Each student accepted an assignment to read specific articles, to make judgements about those related to the study, and to write brief abstracts of those that were germane. The abstracts were used as a basis for the two major sections of the paper.

Section One of the paper is a report of the literature on class size; Section Two deals with the length and scheduling of the school day; Section Three contains conclusions and recommendations. Finally, a list of references is addended.

## CLASS SIZE

A search of the literature on class size yields numerous empirical and descriptive studies of the effect differing size classes have on such variables, as cognitive growth, social and emotional growth, teacher effectiveness, teacher morale and educational costs. The most complete study of class size has been made by Dr. Martin W. Olson (1972). Dr. Olson abstracted nine generalizations based on over sixty research studies related to class size. These are concerned with the effect of class size on both teachers and students.

Olson defines class size as "the number of students meeting with a teacher for a specified period of time for instructional purposes." In order to make comparisons, he defines a class of one to fifteen as very small, eleven to twenty-five as small, twenty-six to thirty-five as large, thirty-six or more as very large. All of Olson's generalizations are based on this continuim. This section of the report has been developed around Olson's framework. Each of his generalizations have been substantiated by additional references from the literature.

> Generalization I: "Teachers employ a wider variety of instructional strategies, methods and learning activities and are more effective with them when they work with fewer rather than more students."

Olson found that teachers were more innovative and also tended to use more practices developed by others when they had smaller classes. Both Varner (1968) and the New York State Teachers Association (1959) concur with Olson's findings. In addition, Nelson (1977) and Vincent (1968) suggest that teachers become more effective in meeting the goals of the classroom as class size is reduced.

Olson further suggests that there is greater student involvement in smaller classes. This he attributes to the teacher's taking a more active role. In smaller classes teachers tend to use more discussion, more laboratory experiences and more student projects. Interactive strategies that require detailed preparation and greater skill on the part of the teacher and student are more often found in classrooms with smaller numbers of children.

> Generalization II: "Students benefit from more individualized instruction when teachers work with fewer rather than more students."

Olson states that teachers with smaller classes have a greater knowledge of each child's interest, goals, styles of learning, personal background and attitudes than do teachers with larger classes. Varner (1968) and the New York State Teachers Association (1959) concur with Olson's generalization that as class size becomes smaller, individualization of instruction increases.

> Generalization III: "Students engage in more creative and divergent thinking processes when teachers work with fewer rather than more students."

Connors (1966), in a comparative study of large group kindergartens with small group kindergartens, showed children demonstrating more variety and creativity in block building and dramatic play activities in the kindergartens with smaller class size. Varner (1968) concludes that small classes also foster more creative social experience. Nelson (1977) suggests that smaller classes allow for more creative and divergent thought processes. Each of these studies supports Generalization III.

> Generalization IV: "Students learn how to function more effectively as members and leaders of groups of varying

sizes and purposes when teachers work with fewer rather than more students."

Olson states that students in smaller classes learn cooperative ways of working together. Cannon (1966) suggests that students in small classes are more secure and make friends more easily. These characteristics eventually result in greater group unity.

> Generalization V: "Students develop better relations with, and have greater interpersonal regard for, other students and other teachers when teachers work with fewer rather than more students."

Generalization V is supported by the work of several theorists and researchers. Connors (1966) feels that kindergarten children have a need for emotional support, attention, affection, and approval from a teacher. He states that the teachers in small classes tend to be more relaxed and good natured and to provide an environment for children that is characterized by warmth, courtesy, empathy, kindness, consideration and respect.

Shane (1961) suggests that smaller classes are essential to the development of an individual's full potential and to the development of human values. Cohen (1966) believes that class size must be determined so that individual children can receive adequate emotional and cognitive attention from the teacher to help them develop into independent, fully responsible learners.

Varner (1968) found that the number and quality of child-teacher contacts is higher in smaller classes than in larger ones.

> Generalization VI: "Students learn the basic skills better and master subject matter content when teachers work with fewer rather than more students."

Surveys indicate that teachers believe that achievement is related to class size. The National Education Association (1975) reported that 97.7

percent of those responding to an opinion poll felt that class size is an important factor in academic achievement. Bozzomo (1978) reported that 50 percent of those teachers responding to an opinion poll believed class size does affect achievement.

Research also supports Generalization VI. Nelson (1977) and Spitzer (1973) reported that students in smaller classes have greater mastery of subject matter than do those in larger classes. Balon (1973) found that class size has a significant effect on achievement in reading with greater achievement occuring in classes with fewer students. Woodson (1968) found that, within a given district, the relationship between achievement and class size has a positive correlation which is constant, regardless of subject area or pupil ability. According to Woodson, smaller classes is a significant factor in helping children obtain greater achievement.

The New York State Teachers Association (1959) reported that teachers who are concerned with discovering individual learning difficulties, providing guidance, direction, stimulation, and remedial procedures opt for smaller classes. A paper sponsored by the American Federation of Teachers (1973) stated that the particular learning needs of young children can best be met in an educational environment which permits increased personal attention from classroom teachers. The Association recommends a class size of fifteen for Early Childhood grades.

> Generalization VII: "Classroom management and discipline are better when teachers work with fewer rather than more students."

Connors (1966) suggests that there is a higher level of frustration and a greater incidence of aggressive acts among children in large classes than in small classes. He feels that this occurs because crowded classes force

children to wait for materials, to take turns on equipment, etc. The waiting leads to pushing and fighting because the children become anxious from inactivity.

> Generalization VIII: "Teacher attitude and morale are more positive when teachers work with fewer rather than more students."

Olson found that teachers received more satisfaction and enjoyment out of teaching and had a greater sense of achievement when they had smaller classes. In large classes teachers are more often frustrated because of the greater amount of responsibility, paperwork, planning and discipline problems. His findings are supported by the NEA (1975), Passerella (1977), Connors (1966), Nelson (1977), and Varner (1968).

> Generalization IX: "Student attitudes and perceptions are more positive when teachers work with fewer rather than more students."

Olson reported that students in smaller classes have better attitudes about teachers and instruction, greater trust in their peers and teachers and more confidence in themselves than do children in larger classes. McKeachie (1971) found that small classes are more effective for attaining goals concerned with positive attitude change than are large classes.

The literature has generally supported the smaller size class as being more beneficial than larger classes in the areas of cognitive development, academic development, social development, emotional development, teacher effectiveness, and teacher satisfaction. While most of these studies did not indicate a specific size, the studies which dealt with kindergarten classes in isolation felt that they should not exceed twenty, but they recommended an optimal number of fifteen to eighteen.

## LENGTH OF THE KINDERGARTEN SCHOOL DAY

A search of the literature related to the length of the kindergarten school day revealed a variety of schedule patterns. Comparisons of the effectiveness of half-day with full-day programs* and of half-day with full-day-alternate-day programs** have been made. The effects of assigning one group of children to a teacher and classroom in the morning and another group to the same teacher and classroom in the afternoon has also been studied.

Full-day kindergartens have been considered by some educators to be more advantageous to children's learning than half-day programs because of the increased amount of time spent in the classroom. The studies reviewed, however, did not yield conclusive evidence. Groton and Robinson (1968) concluded that the extra time children gained in a full-day session would provide children a greater opportunity for learning and development at a crucial time in their lives. The authors felt that the large proportion of the schedule which must be devoted to routines, such as cleaning-up, dressing, undressing, and transporting children to and from school leaves insufficient time for children to participate in meaningful learning activities.

An extended day program (4 1/2 to 5 hours) was developed in the

*For the purposes of this report half-day programs will be those that are approximately three hours in length, full-day programs are those that are approximately five or more hours in length.

**Full-day-alternate-day programs are those that meet every other day for a full day.

Ferguson Florrissant School District in Missouri (1974) to provide a curriculum stressing cognitive, social and physical development. The researchers concluded that the increased time in school gave the children the opportunity for a greater variety of learning experiences. The program offered the children more personalized instruction and appeared to provide for the establishment of better parent-teacher relationships.

Winter and Klein (1973), in a study sponsored by the Bureau of Elementary and Secondary Education, attempted to determine the effect of extending the kindergarten day for groups of educationally advantaged and disadvantaged children. Both groups participated in similar kindergarten activities in the morning. The disadvantaged children received individual tutoring during a ninety-minute afternoon period; the advantaged children spent the additional time in learning center activities or in special projects. The two experimental full-day and two control half-day groups were matched on the basis of standardized tests and teacher ratings. Both experimental groups showed significant growth over that achieved by the control groups. The greatest gains were made by the disadvantaged experimental children.

The previously cited research supports a full-day kindergarten. Johnson (1974) holds an opposite view. In a three-year study comparing the effectiveness of full-day programs with half-day programs, Johnson found no significant difference between the two groups as measured by tests of readiness and achievement. There was also no significant difference between the two groups in first grade placement and reading-level attainment one year later.

Three studies have compared school adjustment and academic achievement of children in full-day, alternate-day and half-day daily programs. The results are not conclusive.

A study of the effectiveness of the full-day-alternate-day kindergarten and of the half-day, every day program was made in the Grand Rapids Independent School District, Minnesota in 1974. Results of the four year study revealed no significant difference in readiness for school as tested by the Metropolitan Readiness Test (Form B) between children in the two schedule patterns.

The Grand Rapids study found that both parents and teachers favored the full-day-alternate-day program. They felt that the full-day-alternate-day schedule was more conducive to meeting the physical, social, and instructional needs of children. Parents and teachers also felt that children were more actively involved when they were in the full-day-alternate-day program and that there was more time for free play activities on the full-day-alternate-day schedule.

A Minnesota Department of Education study (1972) showed advantages in readiness abilities for children attending school on a full-day-alternate-day schedule when compared to those in half-day every day sessions. Children in half-day classes scored significantly higher on the specific readiness areas of naming numerals and sounds of letters. This study found that parents favored full-day-alternate-day sessions. However, only 35 percent of the teachers preferred the pattern; 40 percent of the teachers disapproved it. Teachers' negative reactions to full-day-alternate-day sessions included their evaluation that the day is too long and that carry over from one meeting day to the next seemed difficult for the children.

Helen Cleminshaw (1977) found significant academic differences between full-day-alternate-day and half-day every day programs. Full-day students were more successful on academic outcomes than were those in the half-day

sessions. Parents favored the all day programs because of convenience. Student participation and interest were higher in the full-day-alternate-day than in half-day programs.

The "Two for One" morning and afternoon program is a format in which the teacher is responsible for one group of children in the morning and for a second group in the afternoon. Harris (1969) states that the "Two for One" schedule causes schools to eliminate many important features of "effective and appropriate" kindergartens. She feels that it is difficult for a teacher with morning and afternoon classes to provide for all of the needs and interests in both classes. The shortened day cuts into the children's projects and constructions, making it impossible at times for them to continue their work to completion. Sharing the classroom prohibits children from leaving projects to work on over many days, since this practice requires classroom space and materials needed by the next group. When two groups must share the space for display and storage the contribution to a positive self-image through children's showing their work is also limited. A final conclusion of the Harris study was that teachers found working with two groups of children physically and mentally exhausting.

Many school districts are concerned that a full-day program may cost more than a half-day. However, the Gorton and Robinson (1968) study suggests that while the initial cost may be greater, it will essentially be offset by the school district receiving full state aid for each child. The supply and maintenance costs will be less because of the fewer number of children using a room and its equipment. There is also a saving in transportation costs because the noon day trip to switch class groups is eliminated

Summary

The results of the literature search on length and scheduling of the school day does not produce conclusive evidence on the advantages of half-day or full-day programs to children. A more important factor may be related to whether teachers have one or two groups of children a day. Teachers who work with two groups indicated frustration with trying to provide for all the needs and interests of two different sets of children a day. They felt that there was not suitable time or space to meet the needs of each individual child.

## CONCLUSIONS

The search of the literature on class size has revealed a positive correlation between small class size and positive teacher self-concept, positive child self-concept, children's school success and increased child-child interaction. As class size is decreased children do better on the previously mentioned variables.

Olson's nine generalizations and the additional studies that were reported support the premise that smaller classes are more beneficial to the development of the whole child. There were no cases where either research or theorist supported large classes. It is imperative that school districts keep kindergarten class sizes at a level that will insure the optimal growth for children.

The studies on length and scheduling of school day tended to show no significant difference in readiness or achievement. It is necessary to keep in mind that readiness and achievement are variables that can be easily measured. There are other benefits of full day programs that are more difficult to evaluate. The leisurely pace of the extended day presents greater

opportunities for socialization, for physical development and for cognitive problem solving. The House Joint Resolution is concerned with children's developing positive attitudes toward self and school and with kindergarten children's having experiences that are consistent with their learning styles and developmental levels. The full-day program appears to offer more potential for meeting these goals than does a half-day.

While research on the length of school day is somewhat conflicting, the importance of a teacher's having only one group of children is evident. The teacher frustration which arises from working with two groups causes lower teacher self-concept, which in turn causes lower student self-concept. This affects a child's cognitive development and socialization.

The third and last conclusion to be drawn from this study is that teacher self-concept is a variable that can affect many aspects of the kindergarten program. In support of this conclusion Edeburn and Landry (1974) found that student self-concept was significantly related to teacher self-concept. As the teacher's self-concept improved so did the self-concepts of the children. Aspy (1975) reported that a teacher's self-concept was positively related to their children's achievement as measured by the Stanford Achievement Test.

From the previously cited studies you can infer that there is a relationship between class size, teacher self-concept and child self-concept. As class size is reduced, teacher self-concept improves; children's self-concept and achievement also improves. However, if class size is increased, not only is teacher self-concept negatively affected, but there is also a negative effect on children's self-concept and children's achievement.

Educators must be aware of the importance of teachers having the positive self-concept necessary to insure quality educational experiences for

children. Teachers must be given the respect and consideration due professionals.

## RECOMMENDATIONS

1. Kindergarten class size should be established at fifteen to eighteen students with a maximum allowable number of twenty.
2. Kindergarten should be on a full-day schedule with a minimum of five hours per day. Teachers should not be assigned two groups of children per day.

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# THE EFFECTS OF THE ORGANIZATIONAL PATTERNS OF THE KINDERGARTEN ON ACADEMIC ACHIEVEMENT

## ABSTRACT

Darlene White
Dr. Katharine C. Kersey
Old Dominion University
December 1978

Section 2a of Appendix E

Research indicates that attempting to determine the degree of academic achievement based on the organization of the classroom is very difficult to measure leaving us with a wide variety of results. A number of schools are beginning to add "openness" to some extent to their curriculum. As a result of this there should be more research results available in the next few years. McPartland sees this as a possible danger where programs will be assessed merely in terms of "batting averages." It is his belief that since there is such a wide discrepancy in the research results and since most studies are not equal in terms of measured openness, etc., that "each study must stand on its own as a convincing evaluation of openness if it is to be considered with other studies in a combined assessment of open education." (McPartland and Epstein, 1977, p. 133)

Moore sees a combination of programs as being a better answer to the problem. The last decade has shown the worth of more structured learning activities. Informal practices have also been shown to be of importance in the child's learning. One of the important aspects of the informal process is the attitude toward learning that the child develops. Moore sees this as resulting from the child's view of the adult actively engaged in a learning situation with the child because he enjoys it. It is her feeling that "in all probability, both make significant contributions to the child's competence." (Moore 1977, p.75)

Perhaps what we really need to do is reassess our values in regard to the education of our children. Grand and Gold summarize this viewpoint:

> How are our values reflected in our goals for children? Do we want children who stop learning when they no longer

have to take a test? Do we want children who can recite the correct answers without understanding? Or do we want children who learn to think for themselves, to question events, to turn to books to get answers; who are unique, creative and interesting people?

What is happening to values such as a positive self-image, confidence in one's ability to succeed, an eagerness to learn, an ability through problem-solving to function independently, and a joyful and enthusiastic attitude toward school?

Children's needs have frequently been the last consideration when establishing educational goals. Pressure for academic achievement, reflecting adult goals and needs, may ignore the child for whom it is intended. As long as we use test scores as our sole criterion for a child's success, no "new" educational method stands much chance of succeeding. As long as we respond uncritically to the public's needs for immediate gratification--their unwillingness to wait a few years to see results potential progress may be stifled as each new approach becomes distorted and eventually is thrown out.

Before we rush into any "new" methods or programs, perhaps we need to look harder at what we have, appreciate the learning taking place, and reassess the goals we establish for our young children. (Grand and Gold 1975, p. 213)

## CONCLUSIONS

1. Organizational patterns cannot be clearly identified and defined.
2. There is evidence of success (academic) with all approaches (traditional, "open," skill-oriented, cognitive approach).
3. Many variables confound the results: length of time children have been in program, degree of openness in the program, types of tests used, attitudes of teachers, etc.)
4. The "best approach" is probably a combination of organizatinal patterns.
5. We need to redefine our goals for young children - and focus on long-term as opposed to immediate results.

OLD DOMINION UNIVERSITY

# A COMPARISON OF THE EFFECTS OF AN OPEN OR TRADITIONAL CLASSROOM SETTING ON ACADEMIC ACHIEVEMENT

by

DARLENE WALKER WHITE

ADVANCED CHILD STUDY TECHNIQUES, 607, PQS

DR. KATHARINE C. KERSEY

NOVEMBER 28, 1978

Section 2b of Appendix E

## HISTORICAL OVERVIEW OF PRESCHOOL EDUCATION IN THE UNITED STATES

The traditional kindergarten in the United States was, from the beginning, concerned mainly with meeting children's developmental needs. It has always been what educators now term an open classroom, particularly that part of the program commonly referred to as the "work-play" period. (Grand and Gold, 1975, pg. 211) Why, then is there such a debate over open or traditional approaches to preschool education today? A look at the development of preschool education in this country might help to clarify the problem.

Between the years of 1924 - 27, the Laura Spellman Rockefeller Fund invested 12 million dollars "to establish or support child study centers in major universities throughout the United States". (Moore, 11, 1977, pg. 70) These centers had three purposes: "to conduct research, teach child development, and disseminate developmental information that would promote the welfare of women and children in our country." It is Moore's belief that this investment brought about the creation of what we call the field of child development. There were soon nursery schools operating in each of these centers. They served as laboratories for the observation and research of child study. Faculty members from these centers and other institutions met in 1929 and organized the National Association for Nursery Education. Today this organization is known as the National Association for the Education of Young Children. (Moore, 11, 1977, pg. 71)

Research states (Moore, 11, 1977, pg. 71) that these laboratory schools used an approach to education that was informal--patterned after the natural home-life situation that was most normal. This allowed the observers to see normative development in an environment as close to that of the home as possible. Other day care centers and preschools took their

lead from these laboratory centers and tended to follow along with their approach. (Moore, 11, 1977, pg. 71)

Preschool education remained fairly stable in its approach for the next forty years. (Moore, 11, 1977, pg. 71) Head Start appeared on the scene at about this time. While the original Head Start classrooms were similar to the traditional nursery schools, they soon began to narrow their purposes and change their approach. (Moore, 9, 1977, pg. 55) The Head Start programs concentrated on the acquisition of specific learning skills such as how to follow instructions, listening to the teacher, and concentrating on learning materials. They saw the preparation of children for school as their main purpose. (Moore, 11, 1977, pg. 69) The programs were geared to the disadvantaged child who was having difficulty in school. It was felt that helping him develop better reading skills was the answer to his problem. The result was to create a kindergarten environment that restricted free play and began formal teaching earlier. The outcome of this was that "the disadvantaged child was being denied the firsthand experiences and enriched background that he needed and was given workbook type activities one year earlier". Research further states that "the concept of the kindergarten was undermined. Teachers, instead of increasing their skills and looking for new manipulative materials, too often turned to formal first-grade teaching methods." (Grand and Gold, 1975, pg. 213)

This approach to education was in contrast to the traditional approach where the program concentrated on the whole child. The "whole child" approach placed equal emphasis on developing all aspects of the child including physical, social, emotional as well as intellectual areas. Getting along with others--peers as well as adults--were strong goals. Intellectual concepts were developed through natural occurrences in the classroom. There was no set amount of skills or knowledge the child had to

know when he finished kindergarten. "The meaningfulness of what was learned was deemed of major importance, and intrinsic motivation to learn was paramount." (Moore, 11, 1977, Pg. 49 & 70)

Research has shown then, that kindergartens were based on the views of child developmentalists prior to Head Start. Since Head Start the kindergarten has been modeled more after an elementary school class with the importance being on specific curriculums and lessons totally directed by the teacher. (Moore, 11, 1977, pg. 70)

## THREE DIFFERENT RATIONALES FOR EARLY CHILDHOOD PROGRAMS

Zimiles states that if we concern ourselves with programs developed for the three to five year olds, we can differentiate three perspectives on program development. (Zimiles, 1978, pg. 510)

The first type is concerned with the survival of the child who has no one to care for him or is in a situation that is depriving him in some harmful way. The second perspective sees early childhood programs solely in terms of acquiring academic skills. Children who are slow or have more trouble than others should merely have started school earlier. They see education as needing to be didactic and aimed toward academics only. Early childhood education is only to have the child acquire the skills and information necessary to make it in school. The third perspective is, in Zimiles' opinion, the most complicated. "It views schooling in relation to the full span of human development in all its multifaceted, interacting paths of growth." (Zimiles, 1978, pg. 510)

It is Zimiles observation that these three different perspectives also involve three different implications for the running or organization of an early childhood program. The first view would concern itself with a program aimed at custodial care. They would be interested in reaching only those children who were seriously in need of help of a more physical nature.

The program would operate with a very low budget so that the teachers would be warm and friendly but not necessarily educated in the needs of children. The second view would concern itself with a program aimed solely at academic achievement. The only goals here would be subjects to be learned and skills to be acquired. They are merely concerned with preparing children for the next year's work. The third view, a developmental view, would concern itself with a program aimed at meeting the total needs of the child. It has been called a "cognitive-developmental" approach by Kohlberg and a "developmental-interaction" approach by Shapiro and Biber. They list seven goals as the aim of their program. (Zimiles, 1978, pg. 511 - 513)

1. To strengthen the commitment to and pleasure in work and learning.
2. To broaden and deepen sensitivity to experience.
3. To promote cognitive power and intellectual mastery.
4. To support the integration of affective and cognitive domains.
5. To nurture self-esteem and self-understanding.
6. To encourage differentiated interaction with people.
7. To promote the capacity to participate in a social order in the classroom and in the school. (Zimiles, 1978, pg. 512 & 513)

Zimiles feels that "education should be regarded as an institutional force that shapes human development and not merely as a training ground for preparing children to assume adult roles and responsibilities. (Zimiles, 1978, pg. 513)

## VARIOUS INSTRUCTIONAL MODELS AND THEIR INFLUENCE ON ACADEMIC ACHIEVEMENT

The Head Start program has utilized several different types of curricula and program formats since its beginning. One study by Miller & Dyer in Louisville, Kentucky, 1975 "investigated the overall effects as well as the model - specific effects of four preschool programs--Bereiter and Engelmann, DARCEE, Montessouri, and a traditional program." (Moore, 9, 1977, pg. 55)

"The Bereiter and Engelmann model is a highly didactic, drill-oriented program in which the teacher works with small groups of

children for three 20-minute lesson periods a day, one each on reading, arithmetic, and language."

The DARCEE model is also structured around lesson periods but the lessons are not as ritualized and inflexible as in the Bereiter and Engelmann model. Children encode and decode verbal material and work on academic and expressive language skills. The curriculum is organized around units of study including the child, pets, etc. DARCEE teachers attempt to instill in the children wholesome attitudes toward learning, self-confidence as a learner, and the motivation to achieve academically.

The Montessouri program was an authentic one using Montessouri materials and classroom format. Children have training in life tasks (buttoning and tying) and auditory and visual discrimination. The teacher instructs the child in the use of the equipment, much of which is self-corrective and can be assembled in only one way--the correct way. The teacher maintains a low profile and reinforcement is used sparingly.

The traditional program was patterned after the Rainbow Head Start curriculum guide. There is more emphasis on social interaction and play in this model than in the others. The environment is generally enriched with toys, games, science projects, etc. The curriculum is based on things that naturally interest young children. Teachers exert a minimum of control over classroom activity; they encourage curiousity, independence, self-confidence, and enthusiastic participation." (Moore, 9, 1977, pgs. 55 & 56).

There were 296 children in the study with two classes of the Montessouri model and three classes of each of the others. The teachers were all given specific training in the type of model they chose to teach in. Observations were made of the classrooms at various times focusing on either the teacher or students at each observation. Tests used were the Stanford-Binet, the Early Childhood Embedded Figures, and the Behavior Inventory. (Moore, 9, 1977, pg. 57)

The findings of this study were as follows.

"The Bereiter and Engelmann model was the most effective overall in improving children's performance on general cognitive and school content measures. The Bereiter and Engelmann children had the highest IQ scores at the end of the year and (with the traditional groups) gained the most from fall to spring. The Bereiter and Engelmann children and the DARCEE children performed better than other models on the Basic Concept Inventory, etc. reflecting the emphasis in these models on preacademic language and arithmetic skills." (Moore, 9, 1977, pg. 57 & 58)

Moore points out other sources which indicate that children trained in didactic programs do well in classes where the lessons are structured but

do not adapt well to situations where they must think for themselves and take the initiative for problem solving. (Moore, 9, 1977, pg. 58)

Soar and Soar (1969) showed further evidence that cognitive growth was greater during long vacation periods for children who had been in more flexible programs. The possibility exists that a flexible program--one that encourages initiative and self-motivation--will cause greater continuity between learning in and out of school. An open classroom shows children that they can learn even without a teacher or a book. (Moore, 9, 1977, pg. 59)

Day and Brice made a study of the Frank Porter Graham Child Development Center. The Center conducted a "K-2 continuous-progress, open-classroom program, modeled to some extent after the British infant schools, featuring heterogeneous groupings of pupils by age and ability level. (Day and Brice, 1977, pg. 133)

There were 100 six-year old children involved in the study in four classes. The groups were well matched in regard to pre-school readiness and social-geographic conditions. The four classrooms varied in degrees of openness and the Walberg-Thomas Classroom Openness Observation Rating Scale was used as the indicator. (Day and Brice, 1977, pg. 134)

Results of this study indicated that there were no differences as a result of openness or varying patterns of teacher organizations. The children in the open settings, however, did just as well as those in the settings with high emphasis on academic achievement. (Day and Brice, 1977, pg. 136)

The results of a study by Bell and others (1977) found a more structured environment to produce better academic achievement in the primary years. They did, however, admit to several limitations of their study. (Bell, 1977, pg. 265 & 266)

Dunn investigated a school built in Chappaqua, New York, that was built to serve 350 students. It was designed as an "open space" facility.

Her study shows that, on the basis of the PEP (Pupil Evaluation Program), the students in the open classrooms did achieve higher academic scores. This test measures reading and mathematics achievement in grades 3, 6, and 9. It was developed by the State of New York and is required of all students. (Dunn, 1978, pg. 400 & 402)

Some critics have been concerned that students would not do well in a transition from an open situation to a more closed setting. According to Nathan, however, research shows that students made the move easily "except when the teacher in a traditional program had strong philosophical objections to the open program and used the child as an example of its faults. Such comments as "See, if you hadn't gone to that crazy Open School you'd be caught up with the rest of the children!" have had devastating and crippling effects on young people." (Nathan, 1978, pg. 63)

## CONCLUSIONS

Research indicates that attempting to determine the degree of academic achievement based on the openness of a classroom is very difficult to measure leaving us with a wide variety of results. A number of schools are beginning to add "openness" to some extent to their curriculum. As a result of this there should be more research results available in the next few years. McPartland sees this as a possible danger where programs will be assessed merely in terms of "batting averages". It is his belief that since there is such a wide discrepancy in the research results and since most studies are not equal in terms of measured openness, etc. that "each study must stand on its own as a convincing evaluation of openness if it is to be considered with other studies in a combined assessment of open education." (McPartland and Epstein, 1977, pg. 133)

Moore sees a combination of programs as being a better answer to the problem. The last decade has shown the worth of more structured learning

activities. Informal practices have also been shown to be of importance in the child's learning. One of the important aspects of the informal process is the attitude toward learning that the child develops. Moore sees this as resulting from the child's view of the adult actively engaged in a learning situation with the child because he enjoys it. It is her feeling that "in all probability both make significant contributions to the child's competence." (Moore, 11, 1977, pg. 75)

Perhaps what we really need to do is reassess our values in regard to the education of our children. Grand and Gold summarize this viewpoint very well.

> How are our values reflected in our goals for children? Do we want children who stop learning when they no longer have to take a test? Do we want children who can recite the correct answers without understanding? Or do we want children who learn to think for themselves, to question events, to turn to books to get answers; who are unique, creative and interesting people?
>
> What is happening to values such as a positive self-image, confidence in one's ability to succeed, an eagerness to learn, an ability through problem-solving to function independently, and a joyful and enthusiastic attitude toward school?
>
> Children's needs have frequently been the last consideration when establishing educational goals. Pressure for academic achievement, reflecting adult goals and needs, may ignore the child for whom it is intended. As long as we use test scores as our sole criterion for a child's success, no "new" educational method stands much chance of succeeding. As long as we respond uncritically to the public's needs for immediate gratification--their unwillingness to wait a few years to see results--potential progress may be stifled as each new approach becomes distorted and eventually is thrown out.
>
> Before we rush into any "new" methods or programs, perhaps we need to look harder at what we have, appreciate the learning taking place, and reassess the goals we establish for our young children. (Grand and Gold, 1975, pg. 213)

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THE RELATIONSHIP OF THE MATURATION LEVELS OF KINDERGARTEN CHILDREN TO SCHOOL SUCCESS

ABSTRACT

Mary Lindsey Hester

Dr. Katharine C. Kersey

Old Dominion University

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Section 3a of Appendix E

When one begins a search of the literature in order to investigate the relationship between maturation levels of kindergarten children to school success, one finds that most of the research deals with chronological age and not mental age; that most researchers measure school success in terms of cognitive achievement; and that most studies done in this area have dealt with first grade entrance age and not the age of entrance into kindergarten.

Wilma Hirst in "Entrance Age - A Predictor Variable for Academic Success?" in The Reading Teacher, sums up the findings on entrance age with,

> The analysis of the reviews on early admission and school success in the elementary school indicates conclusively that ... early entrance to first grade does result in lower achievement throughout the grades when comparisons of achievement with control groups of late entrants of similar abilities are made.
>
> Late entrants, though of comparable IQs, had greater retention rates and were rated by their classmates as significantly lower in adjustment on each of nine sociometric dimensions, than early and normal entrants. (Hirst 1970, p. 549)

However, William Hedges (1977), in reviewing over 200 professional articles, a number of ERIC documents and books, and several published and unpublished dissertations and theses, notes that fifty years of research have shown that mental age, in conjunction with other factors, is a significant factor in determining a child's readiness for entering the first grade.

Robert Stake (1960) conducted a study for the state of Nebraska in an effort to determine an appropriate cut-off age for kindergarten entrance. He examined the achievement scores of third graders who had entered school as "younger" students

and found that those who were succeeding at grade level or above had a mean IQ of 121. A table for predicting success, with a mental age range from 4.8 to 6.7, was drawn up for use by school system officials. According to the table, if the mental age "cut-off" were 4.8, then 69% of those admitted would be expected to exceed the national median. By contrast, if the "cut-off" score for kindergarten entry were 5.5 (mental age), then 82% of those admitted might be expected to exceed the national median.

Sex differences cannot be overlooked when examining the factors involved in school success. Vance Hall (1963) examined the cumulative records of sixth graders and found that 77.9% of the boys who had entered the first grade at less than 6-6 were retained sometime during their elementary school experience. He maintains that girls achieve at a higher level than boys, and that the younger boys achieved at a level lower than any of the other groups. Furthermore, his study points out that the younger boys were as much as two years behind the normal-aged girls in some subject areas. (Rosenthal 1969)

Hedges (1977) maintains that a mental age of 6.6 or more would "maximize the probability of success in the first grade" (p. 4). Wilma Hirst (1970) contends that, in learning to read, intensive early drilling is useless, ineffectual, and even detrimental. Furthermore, although some five year olds and early six year olds can be taught to read and write, the effort required (and possible damage incurred) would be much less if the child were allowed to wait for one year.

In describing his massive review of the research, Hedges concludes,

> The main finding of this entire document has been that earlier is not necessarily better. There is no rush.

Childhood has value for itself...Children should not always be considered as in a race to walk first, talk first, and read first. To do this is to spell misery and unhappiness for all but the few -- and even those few will have to keep looking back to make sure no one is gaining on them! (Hedges 1977, p.8)

## CONCLUSIONS

1. Children with IQs above 120 have a better chance of success in school.
2. Boys have a harder time than girls with success in school.
3. Early entrance into first grade results in lower achievement scores.
4. When considering maturational levels, factors other than mental age, such as social, emotional and physical maturity, need to be considered.
5. All children can "succeed" in school if we re-define "success" and make the program flexible enough to provide instruction at the child's own level of development.

One of the earlier studies of the relationship of maturation level to school success was conducted by Elizabeth Bigelow in 1934. Her subjects were 127 children in Summitt, New Jersey - 88 who entered the first grade before age six, and 39 children who had entrance ages between 6-0 and 6-4. Her conclusions are summarized in the table below:

On entering the first grade:

| Chronological Age | | IQ | Expectation of Success |
|---|---|---|---|
| 6-0 to 6-4 | | 110 | Practically certain to succeed |
| Less than 6-0 | | 120+ | Probably will succeed, but need to consider personality factors |
| Less than 6-0 | | Less than 110 | Chance of success is small |
| Less than 6-0 | | 110-119 | Fair chance |
| 6-0 to 6-4 | | 100-109 | Fair chance |
| Less than 6-0 | 6-10+ | | Practically certain to succeed |
| Less than 6-0 | 6-8 to 6-9 | | Good chance |
| 6-0 to 6-4 | 6-4+ | | Good chance |
| Less than 6-4 | Less than 6-0 | | Practically no chance |

(Beattie 1970, p. 1-2; Hedges 1977, p. 129)

THE RELATIONSHIP OF THE MATURATION LEVELS OF KINDERGARTEN CHILDREN TO SCHOOL SUCCESS

Mary Lindsey Hester

ECIEC 607

Dr. Katharine C. Kersey

December 12, 1978

Section 3b of Appendix E

# THE RELATIONSHIP OF THE MATURATION LEVELS OF KINDERGARTEN CHILDREN TO SCHOOL SUCCESS

In searching the literature on this subject, one is immediately struck by certain facts. Firstly, most researchers use age, either mental or chronological, as a criterion for measuring maturation levels. Secondly, most researchers measure school success in terms of cognitive achievement and/or affective growth. Thirdly, all researchers cited herein measured the relationship between maturation and success by comparing younger and older children, with the entrance age to kindergarten or first grade being the determinant for "youngness" or "oldness." And lastly, the studies that involve kindergarten entrance age are limited in comparison to those studies which use first grade entrance age.

Chronological age is the most commonly used criterion for school entrance, and probably will remain so in the near future. (Hedges, 1977) For, to paraphrase Richard Hampleman, school systems and state legislatures can change chronological age entrance requirements easier than they can convince parents to accept mental age or reading readiness as an entrance criterion. Thus, the need to study the question, "At What Age Should a Child Enter School?" still exists.

Muriel Rosenthal, in her masters thesis, "A Comparison of Reading Readiness Achievement of Kindergarten Children of Disparate Entrance Ages," sought to establish whether there were a "measurable difference in the reading readiness achievement" of

children who entered kindergarten at or below age five and those children who were at least five years, five months(hereafter referred to as 5-5)when they entered kindergarten. Her subjects were 18 children, aged 4-9 to 5-1 in the "younger" group, and 21 children, aged 5-5 to 5-8 in the "older" group. The Lee-Clark Reading Readiness Test was administered to both groups in December of their kindergarten year and again the following March. On the first test the mean score for the younger group was 39.33, as compared with a mean of 47.62 for the older group. The level of significance was .02, indicating to Rosenthal that "Before kindergarten training, maturation is the telling factor in determining reading readiness." (Rosenthal, 1969, p. 31) The March test scores reflected a dramatic rise in the younger group's achievement(mean of 53.12), although the mean was still below that of the older group's mean score of 56.19.(Rosenthal, 1969)

Arthur E. Hamalainen(1952)addressed the problem of the younger child's social and emotional adjustment to kindergarten. As cited by Beattie(1970), Hamalainen's study examined 4,277 kindergarten children in a system where the minimum desirable entrance age was 4-9. Hamalainen discovered, however, that 16.5% of the children enrolled in the system were younger than the minimum desirable age. In this underaged group, 76% adjusted readily to kindergarten, whereas 94% of the "normal" aged children adjusted well. (Beattie, 1970)

In his "Entrance Age to Kindergarten and First Grade: Its Effect on Cognitive and Affective Development of Students," Beattie also refers to a study done by Clyde J. Baer(1958) which measured the effect of early entrance to kindergarten on later

schooling. Baer examined the records of 146 eleventh graders who had entered kindergarten in September of the same year. They were matched by IQ, sex, and, in about 2/3s of the cases, by the school entered. Of the 146 students, 73 had November or December birthdates(and therefore had entered kindergarten as underaged), and 73 had January or February birthdates(entering kindergarten at 5-4 or 5-5). Baer compared the younger and older eleventh graders on such items as achievement test scores, high school and elementary school subject grades, and teacher ratings on personal traits. His findings show that the older students made significantly higher scores on achievement tests in social studies, reading, and math; made significantly higher grades; and were rated higher on personal traits by teachers. The younger students were not failures, however. Baer reports that the majority of them made average school progress and received average ratings by teachers on personality traits.

The March 1969 issue of Early Childhood Newsletter, as cited by Rosenthal(1969), carries findings like Hamalainen's and Baer's one step further. It agrees that kindergarten children with October to December birthdays experience more academic, emotional, and social problems than children whose birthdats occur in the January to March period, but adds that boys adjust less well in all areas. The Newsletter therefore recommends a minimum kindergarten entrance age of five years for girls, and 5-6 for boys. (Rosenthal, 1969)

William Hedges(1977), in his 194-page compendium of research conducted between the early 1900's and 1977 on the question of entrance age, says, "Research supports the conclusion that children entering kindergarten under the age of 5...tend to have more

scholastic, social, and emotional problems than children entering at an older age." (Hedges, 1977, p. 6)

As noted earlier, the studies done on the relationship of school success and first grade entrance age are numerous. One of the earliest, conducted by H. M. Partington(1937) with 284 subject children, sought to establish the percentage of children of differing entrance ages who exhibited low, medium, and high achievement through the first six years of elementary school. A second purpose of his study was to determine the percentage of children of differing entrance ages who exhibited achievement below, at, or above what their IQs indicated their achievement might be. In reference to those children with young entrance ages, he found that

> (1)many of the younger children(those entering the first grade as early as 5.0 to 5.5 years of age) are not only capable of, but do achieve excellent results
>
> (2)while many of these bright children in the youngest group do good work, we find here the largest percent of those who are capable of doing better. Apparently a low chronological age is a handicap to many children in school, and with greater maturity they might achieve better results in the same grade with less strain (Beattie, 1970, p. 3)

Rosenthal(1969) and Beattie(1970) cite a study also conducted on sixth graders by Inez King in 1955. Her younger group consisted of 54 children who had entered the first grade between the ages of 5-8 and 5-11. The 50 older subjects had entrance ages between 6-5 and 6-8. All subjects had IQs in the 90-110 range. In addition to measuring the differences in achievement between the younger and older students, King also measured differences in affective behavior as determined by attendance records, the number of referrals to school psychologists, the number of referrals to corrective speech classes, and teachers'

opinions of social and emotional adjustment. She found that school attendance was poorer among younger children(Rosenthal, 1969) and that these children had "more speech defects, nervous indications, and personal and social maladjustments than the older children." (Beattie, 1970, p. 12)

Again, sixth graders were the subjects of a study done by Lowell Burney Carter in 1956. As cited by Hirst(1970)and Rosenthal(1969), Carter concluded that, given the same school experiences, older children have an academic achievement advantage over younger children. In fact, he stated that his study had shown that"87% of underage children do not equal the scholastic achievement of normal age children." (Hirst, 1970,p. 548)

In a study of 553 children who had entered the first grade at 5-8 to 6-0, and who, at the time of the study(1957), were in the second, fourth, and sixth grades, DeVault(1957) found that: (1)students more than two months underage had lower scores on standardized achievement tests than either normal-age pupils or pupils who were less than two months underage; and (2)students who were one day to two months underage had test scores comparable to normal-age students. (Beattie, 1970)

Richard S. Hampleman(1959)attacked the subject of the effect of chronological age on reading success. He asked, "Are pupils who start school at the age of six years, four months or over better readers in the sixth grade than those who started below the age of six years, four months?" (Hampleman, 1959, p. 331) He theorized that the older student should experience more reading success than the younger because his mental age should be greater, his eye-hand coordination should be better, and he should have

had more experiences to draw upon to aid in reading readiness than his younger classmate. Hampleman examined the cumulative records of 58 students from the Bloomington, Indiana school system who ahd entered the system's first grade in September, 1947 and had finished the sixth grade in June, 1953. The data Hampleman collected was date of birth, IQ score, test scores on the Stanford Achievement Test(Reading), and the date the test was taken. He divided the data into two groups - that of students whose entrance ages were 6-3 or younger(Group 1)and that of students whose entrance ages were 6-4 or older(Group 2). He then subdivided the two groups for statistical purposes into Groups 1A and B, and Groups 2A and B, with Group 1A containing the data on the very youngest students and Group 2B, the very oldest. (Hampleman, 1959)

A comparison of the mean reading score of Group 2 with that of Group 1 showed the score of Group 2 to be 4.16 months higher than that of Group 1. The median scores for the two groups demonstrate an even more dramatic difference, with Group 2 scoring 7 months higher than Group 1. Hampleman concludes that "those children who started to school at age six years, four months or more, as a group are superior in reading achievement at the sixth grade level to their younger classmates." (Hampleman, 1959, pp. 332-333)

The margin of difference proved even wider when a comparison of the scores between Group 1A(the very youngest)and Group 2B(the very oldrest)was made - the mean score of 2B showed a superiority of 6.83 months over Group 1A, and the median of 2B showed a superiority of 11.00 months over Group 1A. (Hampleman, 1959)

In analyzing the individual children's scores and their cor-

responding IQ scores, Hampleman found that, of the 15 students in Group 1A, only five were reading up to grade level, and that four of those five students had IQs of 110 or better. Of the remaining 10 students not reading up to grade level, only one had an IQ of 110 or better. In contrast, nine of the 16 students in Group 2B were reading up to grade level(five had IQs below 110). Of the remaining seven students reading below grade level, six had IQs below below 100. Hampleman draws the following conclusion:

> Those children who have a considerably higher IQ than 100 would have an excellent chance for success in reading even if they were only six years, three months of age or below. Those children with IQs below 100 would have very little chance for success in reading if they were this young. (Hampleman, 1959, p. 334)

A. Montgomery Johnston, then editor of Childhood Education, reported on a 1960 study overtaken by the Illinois Association for Childhood Education in which reading achievement, as well as emotional adjustment, was used as a comparative measurement. Thirteen school systems in Illinois participated, with the subject children being divided into three groups - youngest(September, October, November birthdates), oldest(January, February, March birthdates), and middle(April, May, June, July, August birthdates). The study reached the following conclusions: (1)there is a positive association between success in reading during the first five years of school and older entrance; (2) although not highly significant, the percentage of pupils judged to be least emotionally adjusted was greatest in the youngest group and least in the oldest group; and (3)the difference between boys and girls in the area of emotional adjustment was highly significant - boys were shown to be less well adjusted at

all age levels. (Johnston, 1960)

Rosenthal cites a study by R. Vance Hall(1963), in which sex difference also plays a prominent role in the resulting data. Hall examined the cumulative records of sixth graders and found that 77.9% of the boys who entered the first grade at less than 6-6 of age were retained sometime during their elementary school experience. By comparison, only 22.1% of the boys with entrance ages of 6-6 or older were retained. For girls, the figures are 80% retention for the younger group and 20% for the older group. Hall also maintains that girls achieve at a higher level than boys, and that the younger boys achieved at a level lower than any of the other groups. Furthermore, the study points out that the younger boys were as much as two years behind the normal-agedd girls in some subject areas. (Rosenthal, 1969)

Additional studies conducted during the early 1960's(Carroll, 1963; Dickinson and Larson, 1963; Halliwell and Stein, 1964)underscore the results of earlier studies. Carroll reports that average to overage third grade students made consistly higher achievement test scores than their younger classmates.(Hirst, 1970), and that boys have more difficulty reading than girls. (Beattie, 1970) Rosenthal(1969) and Beattie(1970)also refer to the study made by Dickinson and Larson(1963)which points out that the differences between younger and older students which existed at school entrance still persisted at the fourth grade level. In analyzing the achievement scores of younger and older fourth and fifth grade students, Halliwell and Stein(1964)found that the older fourth graders proved superior in reading areas, spelling, language, and math reasoning to their younger classmates. The older fifth grade-

students were shown to be significantly superior to the younger fifth graders in all areas except arithmetic fundamentals. (Beattie, 1970) Halliwell, in a 1966 article, says,

> The analysis of the reviews on early admission and school success in the elementary school indicates conclusively that...early entrance to first grade does result in lower achievement throughout the grades when comparisons of achievement with control groups of late entrants of similar abilities are made. (Hirst, 1970, p. 548)

In citing examples of studies where older students do not prove to surpass their younger classmates, the Miller and Norris study(1967)is frequently mentioned. For instance, Hirst(1970) includes in her research review a finding from the Miller and Norris study:

> Late entrants, though of comparable IQs, had greater retention rates and were rated by their classmates as significantly lower in adjustment on each of nine sociometric dimensions, than early and normal entrants. (Hirst, 1970, p. 549)

This statement, along with another often quoted finding - that the younger children scored lower on three of six measures, but that this difference generally disappeared by the end of the second grade - seems to contradict most other findings. A closer examination of the Miller and Norris study seems to be in order.

The study sought to explore the implications of a 1966 change in Tennessee legislation whereby the cut-off date for school entry would move progressively from December 31 to September 30 in one-month increments during the years 1966-69. Miller's and Norris' subjects were 135 fourth and fifth grade students who has entered the first grade in 1961 in one of four Murfreesboro, Tennessee elementary schools. They were grouped according to their age on September 1, 1961:

Early - 5-8 through 5-11
Normal - 6-0 through 6-7
Late - 6-8 through 6-11

The measurement tools were the Gates Reading Readiness Test(used to initially place the children in the first grade), the Metropolitan Achievement Tests, the Tuddenham Reputation Test(sociometric scale), and the Lorge-Thorndike Intelligence Test. In addition, frequency data on psychological refferals, grade placement, and sex were analyzed. The following results were published: (1)the late group had the highest psychological referral and retention rates; (2)the normal group scored higher than the early group on 28 of 30 variables(Subtests of the readiness test, the MATs, and IQ); (3)the normal group did not score lowest on any variables; (4)the early group scored lowest on the reading readiness test; (5)the late group scored lower than the normal group on 16 of the 30 variables, scoring lowest of all groups on four of the variables; (6)the normal group scored high on eight of nine sociometric variables; (7)the late group scored lowest on all nine sociometric variables; (8)the normal group received the most favorable sociometric rating from their classmates; and (9)the late group received the least favorable sociometric rating. Miller and Norris allude to a possible cause for the unusual results regarding the late group.

> These findings...suggest that parents may have had some reason other than age for postponing schooling for their children in a community in which entrance at from five years, eight months to six years, eight months is the norm. (Miller and Norris, 1967, p. 56)

Weinstein(1968-69)maintains that the overaged subjects in the Miller and Norris study, some as much as one full year older than normal first graders, should not have been included in the statis-

tical analysis of the data, but should have been treated as a separate group. Weinstein also finds fault with Miller and Norris' conclusion that deficiency differences between the early and normal groups disappear by the second to fourth grade. She argues that the subjects in the study had been members of non-graded, ability-grouped classes since the first grade. They had, therefore, not been exposed to classroom situations where there were wide ranges of abilities. (Weinstein, 1968-69)

Miller and Norris, themselves, suggest that the gradual disappearance of the early group's reading disadvantage may be due to the individualized reading program in the Murfreesboro elementary schools. (Miller and Norris, 1967)

In spite of the apparent "unusual" factors in the study, the researchers nevertheless conclude that "additional findings in the present study cast considerable doubt on the notion that raising entrance age requirements helps anyone." (Miller and Norris, 1967, p. 58) They therefore recommend(with the qualification underlined by this author)that "Children who are between five years, eight months and six years of age at the time school opens be admitted <u>if the primary program is flexible enough to provide instruction at their levels of development.</u>" (Miller and Norris, 1967, p. 59)

All of the studies cited above have utilized chronological age as a criterion for entrance to kindergarten or first grade. However, William Hedges(1977), in reviewing over 200 professional articles, a number of ERIC documents and books, and several published and unpublished dissertations and theses, notes that fifty years of research have shown that mental age, in conjunction with

other factors, is a significant factor in determining a child's readiness for entering the first grade. (Hedges, 1977)

Robert Stake(1960)reports on a study conducted to establish the relationship of mental age to school success. The state of Nebraska, in 1960, had October 31 as its cut-off date for entrance into kindergarten. However, those children whose birthdates fell between October 15 and December 31 could enter kindergarten if they were judged to be mature enough - mentally, physically, emotionally, and socially. The Stanford-Binet test was used to measure mental maturity, and a psychometrist judged the physical, emotional, and social maturity of the individual preschoolers. Between 1950(when the cut-off date was established)and 1960, 11,000 children were so tested, with 72% judged to be mature enough to enter kindergarten at an early age. (Stake, 1960)

Since officials of the individual school systems were responsible for setting the Binet "cut-off" scores for their systems, they came to desire a uniform "cut-off" score that would be predictive of school success. In an attempt to establish such a "cut-off" score, it was decided to study the achievement of third graders who had entered school as "younger" students. Their preschool Stanford-Binet scores were compared with the scores they had attained during the primary grades on the Metropolitan Achievement Tests, the Stanford Achievement Test, the Iowa Tests of Educational Development, and the Science Research Associates Achievement Tests. According to Stake, "the early-entrance pupils were found to have a mean IQ of 121 and to be scholastically over a half-year above the mean achievement of third-graders according to national norms for achievement tests." (Stake, 1960, p. 32) The researchers analyzed their data and arrived at a correlation of .57 between mental age

and achievement. A table for predicting success, with a mental age range from 4.8 to 6.7, was drawn up for use by school system officials. According to the table, if the mental age "cut-off" were 4.8, then 69% of those admitted would be expected to exceed the national median. By contrast, if the "cut-off" score for kindergarten entry were 5.5, then 82% of those admitted might be expected to exceed the national median. (Stake, 1960)

Hedges(1977)maintains that a mental age of 6-6 or more would "maximize the probability of success in the first grade." (Hedges, 1977, p. 4) Wilma Hirst(1970)concurs, adding that "most children should have a mental age of 6½ before beginning formal reading experiences." (Hirst, 1970, p. 7) She contends that, in learning to read, intensive early drilling is useless, ineffectual, and even detrimental. Furthermore, although some five year olds and early six year olds can be taught to read and write, the effort required would be much less if the child were allowed to wait for one year. She continues, "early family experiences of the child have a greater effect on his intellectual development than his formal schooling," but that the decision of whether to eneter a child in school or keep him at home, "should be an individual one, worked out whenever possible between the parents and the school." (Hirst, 1970, p. 8)

Braga(1971)maintains that mental age is more closely tied to school achievement than chronological age is. To substantiate his conclusion, Braga refers to Kazienko, who found that "the coefficient of correlation between mental age and school achievement was so high that the addition of IQ and chronological age was not highly significant." (Braga, 1971, p. 37) Braga also cites Hobson, Stake, Hildreth, and Partington as those "who favor mental age as

as a criterion for school admission and cite it as a predictor in school." (Braga, 1971, p. 37)

One of the earliest studies of the relationship of maturation level to school success was conducted by Elizabeth Bigelow in 1934. Her subjects were 127 children in Summit, New Jersey - 88 who entered the first grade before age six, and 39 children who had entrance ages between 6-0 and 6-4. Her conclusions are summarized in the table below:

On entering the first grade:

| Chronological Age | Mental Age | IQ | Expectation of Success |
|---|---|---|---|
| 6-0 to 6-4 | | 110 | Practically certain to succeed |
| Less than 6-0 | | 120+ | Probably will succeed, but need to consider personality factors |
| Less than 6-0 | | Less than 110 | Chance of success is small |
| Less than 6-0 | | 110-119 | Fair chance |
| 6-0 to 6-4 | | 100-109 | Fair chance |
| Less than 6-0 | 6-10+ | | Practically certain to succeed |
| Less than 6-0 | 6-8 to 6-9 | | Good chance |
| 6-0 to 6-4 | 6-4+ | | Good chance |
| Less than 6-4 | Less than 6-0 | | Practically no chance |

(Beattie, 1970, p. 1-2; Hedges, 1977, p. 129)

Hedges(1977)says that, in all of the research he has reviewed, he has"located nothing that basically contradicts Bigelow's conclusions." (Hedhes, 1977, p. 129)

In describing his massive review of the research, Hedges says

The main finding of this entire document has been that earlier is not necessarily better. There is no rush. Childhood has value for itself....Children should not always be considered as in a race to walk first, talk first, and read first. To do this is to spell misery and unhappiness for all but the few -- and even those few will have to keep looking back to make sure no one is gaining on them! (Hedges, 1977, p. 8)

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An Abstract of Requisite Competencies
for the Kindergarten Teacher

Joan Isenberg
Department of Education
George Mason University
Fairfax, Va. 22030
December 15, 1978

Section 4a of Appendix E

## Abstract

A central ingredient in the development of quality programs for kindergarten children is the element of competent teachers. Professional competence is a major factor in determining a child's success in school.

The ultimate importance of the child's early experiences with his/her family as well as in any special program has been well-defined. However, lack of sound research, particularly longitudinal studies which assess the child's outcomes of particular programs based upon selected teacher competencies, has been apparent.

Although there are many variables affecting and acting upon the kindergarten child, it is the teachers themselves who are the key factor. They are the ones who set the tone and prepare the environment for the growth and development of the kindergarten children. Yet it is from this very group of professionals that the most resistance to "school readiness" emerges. "School readiness" should address the problem of preparing programs for the child rather than preparing the child to fit the programs. What seems to be needed is a renewed recognition that schools are for children and that arbitrary age dividers do not presuppose a higher quality program.

Further, there is a need to identify those areas of competence deemed important for kindergarten teachers. Attention must be given to the selection of the most competent kindergarten teachers in order to develop and maintain quality programs which will foster positive outcomes in children.

A literature review in child development and early childhood education located minimal information which referred specifically to the development of quality kindergarten programs through the measurement of teacher behavior in existing kindergarten programs. Using the general description of teacher behaviors obtained from the literature search, guidelines for effective teacher behaviors were established. The content in which these behaviors occur describes a more accurate concept of "competence" in early childhood education.

From the literature, four issues were compiled to aid the definition of teacher competence. These included 1) the purpose of kindergarten programs, 2) the environment of kindergarten programs, 3) the role of the teacher, and 4) a review of the nature and quality of research with teacher behavior.

The discussion of teacher competence proceeds along three barely discreet lines. The nature of competence is "integrative" rather than "additive" and is viewed as a synthesis of knowledge, skills and attitudes.

Results from three surveys (Early Childhood Services Task Force, 1976; Isenberg, 1978; Ward, 1976) indicated several areas of importance for early childhood educators. From these studies, suggested guidelines, incorporating five areas were drawn. These areas include 1) child development, 2) classroom management, 3) interpersonal relations, 4) personal competence, and 5) program/design.

The suggested areas of competence can be used to determine a criterion of performance towards the development of higher quality kindergarten programs. Moreover, they can be used as a means of ongoing self-assessment. We cannot overlook the great impact the kindergarten teacher has on the child's total growth and development.

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# Requisite Competencies for the Kindergarten Teacher

Joan Isenberg, Ed.D.
Department of Education
George Mason University
Fairfax, Virginia
December 15, 1978

**Section 4b of Appendix E**

## Introduction

Of central importance in the development of quality programs for kindergarten children is the element of competent teachers. Professional competence is probably the most important factor in determining the child's success in school (Almy, 1975; Hunter, 1976).

A major area in defining and describing the requisite skills for kindergarten teachers reflects a basic concern with the development of all children. Such concern has major bearing on the need to educate the child's intellectual powers as well as to provide for the development of the child's social, emotional, and physical powers.

A fundamental assumption in the identification of professional competencies for kindergarten teachers starts from the premise that all children have certain developmental needs and that most children learn best in the kinds of environments which have been designed to meet those needs. Additional assumptions include:

1. There is a need for competent kindergarten teachers.
2. Competencies can be identified. These competencies are ones which effect the quality of the kindergarten program.
3. Competencies involve three components: knowledge, skills, and attitudes.
4. Performance is the major source of evidence of such competence.

The ultimate importance of the child's early experiences with his or her family as well as in any special program ( Almy, 1975; Bloom, 1964; Butler, 1974; Hunt,1961; Hymes, 1974) has been well defined. However, lack of sound

research, particularly longitudinal studies which assess the outcomes of programs for young children, has been apparent.

Early childhood research encompasses the physical, psychological, and interpersonal environments which are deemed important to and for the development of young children (Brown, 1969; Hertzberg, 1971; Kohl, 1969; Rogers, 1970, Silberman, 1973). This paper addresses itself to those teacher behaviors thought to promote the optimum development and learning in young children.

It is evident that teacher behavior influences child behavior (Almy, 1975; Combs, 1971; Hunt, 1961). It is the assumption that underlies this position paper. Although there are many variables affecting and acting upon the kindergarten child, it is the teachers themselves who are the crucial element. They are the ones who set the tone and prepare the environment for the growth and development of the kindergarten children with whom they act and interact all day throughout the school year. Yet, according to Morrison (1976), it is from this very group of professionals that the most resistance to "school readiness" emerges.

> Some school districts, at the urging of their teachers, are raising the entrance age for admission to first grade. They require the child to be six years of age by the first of September. The reason generally given for this action is that many children are "not ready" for first grade and therefore teachers experience difficulty in teaching them (pp. 10-11).

Morrison views the issue as one of child readiness

as opposed to school readiness. That is, schools must prepare their programs to get ready for the child, not vice versa. Teachers, therefore, need to design their programs based upon the needs of the child rather than upon preconceived notions of what the child ought to be able to do. It is the contention of several early childhood experts (Almy, 1975; Hymes, 1974; Morrison, 1976) that what is needed seems to be a renewed recognition that schools are for children and that an arbitrary age divider does not serve to meet this need.

There remains, then, a definite need to identify those areas of competence for kindergarten teachers who are responsible for planning and carrying out the daily kindergarten program. More attention must be given to the kinds of teachers we place at this grade level in order to develop and maintain quality programs which will foster positive outcomes for those children who are involved.

A review of the literature in child development and early childhood education revealed few studies which referred specifically to the development of quality kindergarten programs through the measurement of teacher behavior in existing kindergarten programs. Although several studies deal with teacher characteristics in general, only one major study describes competencies for the kindergarten teacher, in particular. Yet, studies identifying teacher competence in related early childhood programs can be applied to the kindergarten programs as well. Essentially, competencies deemed important for pre-school teachers can be considered basic to the kindergarten teacher.

Using the general description of teacher behaviors obtained primarily from the literature search (Early Childhood Services Task Force on Teacher Competence, June, 1976) guidelines were established to obtain information on the effectiveness and interrelationship of particular behaviors. The content in which these behaviors occur describes a more accurate concept of "competence" in early childhood education.

## Definition of Terms

The following definition of terms will facilitate a more thorough understanding of this paper.

### Competence

This is defined as the ability to perform or do a particular task. It can be categorized in the following ways:

#### Knowledge competency

This includes knowledge of psychological theories, teaching strategies, program analysis, and subject matter to be taught.

#### Skill competency

This includes all procedures, operations, activities, and methods relating to classroom performance. Often there is an overlap with the knowledge competencies since the demonstration of the skill presupposes a knowledge base.

Attitude competency

This includes the expression of values, beliefs, and emotional response. It is integral to the previous competency dimensions (Houston and Howsan, 1972).

## Literature Review

From a survey of the literature in child development and early childhood education, four issues were compiled in order to define teacher competence. These areas are:

1. the purpose of kindergarten programs
2. the environment of kindergarten programs
3. the role of the teacher
4. a review of the nature and quality of research with teacher behavior.

### Purpose of kindergarten programs

Children at various stages of development have a number of salient physical, social, and psychological needs. Many of their requirements are well known to early childhood professionals. The following list briefly summarizes those needs of children who are between the ages of four and seven.

1. nutrition
2. mental and verbal stimulation
3. peer play and fantasy play
4. large muscle activity
5. independence
6. learning control of internal impulses
7. affection, security, acceptance, and comfort
8. exploration and manipulation of materials
9. achievement (Early Childhood Services Task Force on Teacher Competence, 1976 , p.7).

Helping to meet the basic needs of children is the

essential purpose of kindergarten programs. Thus, the approach to planning must be a holistic one, that of the whole child.

## Environments of Kindergarten Programs

An increasing amount of evidence (Bessess and Bell,1972; Dinkmeyer, 1970; Glasser, 1969; Piaget, 1965; Shapp,1973) indicates a significant relationship between the cognitive (intellectual), psychomotor (behavioral), and affective (feeling) domain as well as between emotionally healthy feelings about oneself and the ability to relate to others. Although we have a strong tendency to talk of these three domains as separate entities, it is apparent that they cannot be separated. According to Morrison, this tendency

> encourages a fragmentation of teaching which can be deadening to children and also have a tendency to place an emphasis on the cognitive domain to the exclusion of the other two domains, particularly, the affective (p.226).

The kindergarten teacher who prepares an environment for children based upon the acceptance of the integration and interrelation of the three domains exhibits certain qualities and fundamental beliefs. Indicators of the kinds of behaviors and attitudes include a teacher who:

1. does not feel threatened by the children
2. respects and trusts children
3. is honest and accepting
4. believes in, and promotes individual differences in children
5. promotes feelings of warmth
6. avoids imposing values on children
7. encourages children to express their own ideas (Morrison, 1976)

## The role of the teacher

The role of the kindergarten teacher is based upon the premise that education is a continuous process of interaction with the physical and human environment. A literature search ( Early Childhood Services Task Force on Teacher Competence, 1976) led to the conclusion that human interaction should be viewed as the single most important ingredient in early childhood programs. In this context, the teacher's role in the development of the child is essential not only in providing appropriate materials but also in relating to each child in a positive manner. Research and programs for young children show that in order to maximize that contribution to the fullest, teachers should be relating to children in a way that insures:

1. the child's mastery and satisfaction in interactions with the physical environment, his peers, and adults and
2. consistency between the experience in the program and the characteristics the child brings to the program (p., 9).

These criteria have an effect in the approach that kindergarten teachers will take both in fulfilling their roles and in broadening the scope of their activities. Teachers in this capacity need a combination of personal characteristics, skills, and knowledge in order to be effective.

## Nature and quality of research with teacher behavior

Of the research studies dealing with teacher competence and teacher behavior, the most comprehensive one

was conducted by the Early Childhood Services Task Force on Teacher Competence in 1976. The study, which was both descriptive and observational in nature, sought information about specific behaviors of kindergarten teachers. Responses were solicited from 331 teachers, parents, and coordinators of kindergarten programs throughout Alberta, Canada.

According to the respondents of this study, the most essential competency for a kindergarten teacher is interpersonal competence; primarily competence in leadership and communication skills. In addition, interpersonal competence is stressed by this group as the area in which they are most ill-prepared. Beyond this, they also strongly believe that their pedagogical knowledge needs a wider experiential base in order to provide them with the skills to make them effective in the classroom.

Results from this study indicated a high positive relationship among all competency dimensions. Teachers who exhibited skillful interpersonal behavior tended to organize material into meaningful programs. Conversely, teachers who were rated poorly in personal behavior were often inept in the area of program development.

A second and related set of competencies was developed by the Child Development Associate Consortium (CDA) which was formed in 1972 under the auspices of the Office of Child Development. Although this organization was designed to train and to assess child care paraprofessionals and to assign a credential to those assessed as being competent, the types of demonstrated competencies expected from them are similar to those one would expect

from a kindergarten teacher. The CDA consortium has established competencies within 6 general areas. These categories are consistent with the four major areas outlined in the literature review section of this paper. In addition, the competencies used as a basis for assessment in the CDA program were developed by experts in the field of Early Childhood and the CDA training program is directed toward the achievement of those skills. A fundamental assumption in this program is that competency-based training can provide the necessary skills for paraprofessionals to work effectively in child care settings.

Based upon the competencies developed by the Early Childhood Services Task Force (ECSTF) and the CDA, a third study (Isenberg, 1978) was conducted in the State of New Jersey to determine requisite competencies for the head teacher in day care programs. The target population of head teachers was responsible for planning and implementing programs for pre-school children as wellas for kindergarten children. Results from a survey study of 103 teachers and administrators indicated that competencies which were deemed important to this teaching role were similar to those of the ECSTF and the CDA (Appendix A).

Although respondents rated each of the 35 competency items on a 10 point scale, more than half (60%) of the items received a "high" rating. Most of these items (87%) tapped three main categories which related highly to the initial areas already described (Appendix B).

The tasks of the early childhood educator are arduous and complex. Teachers need to be both nurturing individuals as well as being challenging and accepting.

Professional competence

The discussion of teacher competence proceeds along three barely discreet lines. The nature of competence is "integrative" rather than "additive" (ECSTF, 1976). That is, competence is viewed as a synthesis, rather than a collection of knowledge, skills, and attitudes. These components are formed and interact with each other to produce facilitative behaviors of the child and together they provide a basis for identification of those behaviors which make a competent teacher.

Results from three surveys (CDA; 1976, ECSTF; 1976; Isenberg; 1978) tapped several dimensions which indicated areas of importance for early childhood educators in order to be considered "competent". From these studies, suggested guidelines can be drawn in order to determine what basic skills should be required of the kindergarten teacher. These skills incorporate five areas: 1) child development; 2) classroom management; 3) interpersonal relations; 4) personal competence; and 5) program design.

Child development

The kindergarten teacher must demonstrate the ability to look to good theory as the basis for the curriculum. S/he must deliberately build the program on the best knowledge of why s/he is teaching, whom s/he is teaching, what s/he is teaching, and how s/he is teaching.

1. Teachers in these programs keep their goals utterly clear.
2. Teachers in these programs are child-centered.
3. Teachers in these programs are society-centered.

4. Teachers in these programs are subject-matter centered.
5. Teachers in these programs have the tools they need to do the job (Hymes, 1975, pp.34-35).

Classroom management

The kindergarten teacher must demonstrate the ability to handle behavior of both individuals, small groups, and large groups of children by using effective, democratic procedures. Some of these procedures and skills include the ability to:

1. provide a well-paced program
2. plan and carry out the educational program
3. deal with different types of behavior
4. use praise and encouragement to reward desired behaviors
5. establish clear behavioral limits
6. provide appropriate activities for the developmental level of each child (Isenberg, 1978)

Interpersonal relations

The kindergarten teacher will demonstrate the ability to facilitate the child's mastery and satisfaction in interactions with his/her peers and adults as well as the physical environment. S/he will also help to stimulate the child's exploration of the environment and view success and failure as informative rather than punitive. Suggested skills in this area include the abiltiy to:

1. support the child's goals in a particular activity
2. recognize and use individual characteristics
3. provide a socially and psychologically safe environment for children

4. provide the structure and encouragement necessary for children to explore, learn, and master their environment
5. respond to the context, motivation, and signifcance of behavior
6. communicate effectively (ECSTF, 1976).

Personal competence

The kindergarten teacher will serve as an effective role model of behavior for children as well as for other adults. The teacher will demonstrate the ability to:

1. understand her/himself
2. express curiosity and exploratory behavior to children
3. express a sense of humor and perspective
4. accept people without prejudice
5. be committed to human growth
6. be flexible
7. be emotionally responsive

Program design

The teacher will demonstrate the ability to relate the use of time, space, and activities to the developmental levels, learning abilities, and the individual characteristics of children. S/he will demonstrate the ability to:

1. involve parents, professionals, and other people in the planning and implementation of the program
2. facilitate language development
3. promote problem-solving behaviors among children
4. facilitate sensory-motor development
5. increase the child's self-knowledge, self-

esteem, and self-confidence

6. be aware of individual differences and the long-term needs of children.

There are many aspects to the competent kindergarten teacher. Although they have categorized as separate skills, they are, in practice, highly integrated.

## Summary

The preceding suggested guidelines for describing the kinds of competencies one should look for in selecting a kindergarten teacher should be evident among all staff who work with young children in any type of program. assumption starts from the premise that these are basic skills and are required of all staff.

At present, these areas of competence which are considered important in order to develop effective and high quality programs for kindergarten children can be used to determine a criterion of performance. Moreover, it can also aid in describing alternative ways of demonstrating such competence as well as being used for self-assessment.

The absolute acceptance that the teacher is crucial to the child's total development cannot be underscored enough. Children are learning predominately from their immediate experiences with people, places, and things. It is the quality of teacher mediation and guidance during these experiences that has the greatest impact on learning. We cannot overlook the necessary competencies in selecting teachers for this most important professional role.

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| Category | Item # | Rating High | Medium | Low |
|---|---|---|---|---|
| Knowledge of Child Development | 19, 30, 11, 21, 10, 3, 17, 35, 2, 18, 15, 29, 16, 6, 32 | X | | |
| | 5, 1 | | X | |
| Classroom Management | 19, 11, 21, 10, 3, 17, 35, 2, 18, 29, 16, 6, 32 | X | | |
| | 31, 5, 1 | | X | |
| Program Design | 30, 11, 21, 27, 3, 17, 35, 2, 18, 29, 16, 6, 32 | X | | |
| | 5, 33, 7, 1, 8, 14 | | X | |
| Interpersonal Relationship | 24, 26, 9, 15, 25 | X | | |
| | 31, 5, 23, 12 | | X | |
| Knowledge of Community | 20, 22 | | X | |
| | 28, 34 | | | X |
| Miscellaneous | 4 | X | | |

## QUESTIONNAIRE

This questionnaire contains thirty-five (35) statements of selected competencies which may vary in their degree of importance for HEAD TEACHERS employed in full time, licensed day care centers. A competency is an ability which a person shows in his/her performance in the classroom. Your responses will be kept confidential and will be used *only* as part of group data.

This column is for computer use only!

## INSTRUCTIONS

You are asked to rate the importance of *each* of the competencies following these steps:

1. Ask yourself: How important do I think this is for the HEAD TEACHER?
2. Rate each competency by circling the appropriate number. (N)

Be sure to rate *all* competencies. There are no right or wrong answers. Please answer the way you really feel.

Subject: _____

Card # _____

## PART I
## STATEMENTS OF ABILITIES

| The HEAD TEACHER is able to: | NOT AT ALL IMPORTANT ◄ | | | | | | | | | EXTREMELY IMPORTANT ► | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Keep accurate written records of each child's development. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 5. _____ |
| 2. Provide opportunities for children to choose and experiment with a variety of materials. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 6. _____ |
| 3. Plan a well paced program for the children. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 7. _____ |
| 4. Identify illness signs in children. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 8. _____ |
| 5. Provide a balance of structured and unstructured activities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 9. _____ |
| 6. Plan and carry out the educational program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 10. _____ |
| 7. Apply guidelines of health, safety and nutrition. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11. _____ |
| 8. Include multi-cultural materials and resources in the program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12. _____ |
| 9. Be a positive role model. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 13. _____ |
| 10. Deal with different types of children's behaviors. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 14. _____ |
| 11. Use praise and encouragement to reward desired behaviors. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15. _____ |
| 12. Involve parents in the program. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 16. _____ |
| 13. Help children develop a sex role acceptable to their own ethnic background. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 17. _____ |
| 14. Use community resources to aid children's learning. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 18. _____ |
| 15. Accept both positive and negative feelings of children. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 19. _____ |

| The HEAD TEACHER is able to: | NOT AT ALL IMPORTANT | | | | | | | | | EXTREMELY IMPORTANT | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 Adjust pace to meet the changing needs of children. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 20. |
| 17. Observe children objectively. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 21. |
| 18. Establish clear behavioral limits. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 22. |
| 19. Listen to what the children are saying. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 23. |
| 20. Comply with basic licensing regulations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 24. |
| 21. Provide appropriate activities for the developmental level of each child. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 25. |
| 22. Know about child abuse laws and the proper persons to contact if needed. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 26. |
| 23. Talk with parents about the child's life both in and out of the center. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 27. |
| 24. Work cooperatively with other staff. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 28. |
| 25. Relate to parents in a non-judgmental way. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 29. |
| 26. Take charge in an emergency situation. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 30. |
| 27. Help children use their imagination and ideas in learning. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 31. |
| 28. Assist parents in using state and local service agencies, if needed. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 32. |
| 29. Recognize when to give help and when to encourage self-help. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 33. |
| 30. Create a warm, accepting environment. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 34. |
| 31. Help each child establish a positive relationship with at least one staff member in the classroom. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 35. |
| 32. Select appropriate materials which satisfy children's sensory needs. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 36. |
| 33. Read to children with expression. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 37. |
| 34. Provide information about special education laws, if needed. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 38. |
| 35. Add to his/her knowledge of early childhood education and use it in the classroom. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 39. |
| Others. Please specify and indicate the rating. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 40. |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 41. |

Check the minimum level of formal education you would require of a HEAD TEACHER. 42.

1. High School diploma.
2. Associate's degree.
3. Bachelor's degree.
4. Master's degree.
5. Other, Specify.

**PART II**
**BACKGROUND INFORMATION**

To assist in meaningful interpretation of this study, please check (✓) the blank which *best* describes you, your beliefs or your present working situation.

1. In this center, what position do you hold? 43. _____
   a. Paraprofessional. _____
   b. Teacher. _____
   c. Head teacher. _____
   d. Teacher/director. _____
   e. Director. _____
   f. Other. Describe.

2. How many years have you been working in the field of day care? 44. _____
   a. Less than 2 years. _____
   b Two to five years. _____
   c. Five to ten years. _____
   d. Over ten years. _____

3. In which age range do you fall? 45. _____
   a. Under 25. _____
   b. 25-35. _____
   c. 35-45. _____
   d. 45-55. _____
   e. Over 55. _____

4. Indicate the number of male and female persons in your center who directly work with the children. 46. _____
   a. Male.
   b. Female.

5. Indicate your highest level of formal education. 47. _____

a. Less than 12th grade. _____

b. High School diploma. _____

c. Bachelor's degree. _____

d. Associate's degree. _____

e. Master's degree. _____

f. Other. Specify. _____

6. Indicate the number of children in each of the following age groups. 48. _____

a. Two year olds. _____

b. Three year olds. _____

c. Four year olds. _____

d. Five year olds. _____

e. Other. Specify. _____

7. Indicate the number of adults working in each of the following age groups. 49. _____

a. Two year olds. _____

b. Three year olds. _____

c. Four year olds. _____

d. Five year olds. _____

e. Other. Specify. _____

*THE SIGNIFICANCE OF SELF-ESTEEM

IN THE

SUCCESSFUL DEVELOPMENT OF CHILDREN

*This section of Appendix , consists of excerpts from materials provided the joint subcommittee by Dr. Robert Gilstrap, member of the joint subcommittee's Literature Search Subcommittee. The sources consolidated for this section are Perceptions of Success-Oriented Schools, (October, 1978) by the Educational Leadership Council of America and The Experience of Success: Its Effects on Learning and Behavior, (October, 1975) by Jane Franseth and Fred T. Williams.

A collection of information pertaining to success experiences and its relationship to school success and the development of positive self-concepts in children was not available until the publication of The Experience of Success: Its Effect on Learning and Behavior in 1975 by the Educational Leadership Council of America.

The ELCA (Educational Leadership Council of America) conducted a search of the literature regarding success and found that while "experiences of success" was not a major topic of concern in the literature, each authority made some reference to it in his writing. In exploring the nature of success, it was found that "success" is really a challenge or hurdle that is posed and overcome. Success to be significant implies some kind of goal accomplished or risk that is overcome. The study addressed (1) success and failure; (2) the role of self-image, motivation and personality development; (3) creating experiences and the environment of success; (4) examples of significant efforts to create experiences of success; and (5) ways of making education more effective. It was concluded that the available literature, to a large extent, supports the assumption that "experiences of success" are essential to the development of every human being; that self-concept (self-image) is an index or indicator of a person's feelings of success. Feelings of success build a positive self-image. A primary function of the school is to provide opportunities for success to happen.

Experiencing success is crucial and essential for optimum development of any human. Success experiences must be real and authentic and to have their full effect on a person, they must be perceived as success by that person. A person's inner knowledge of success is the foundation of a wholesome and positive self-concept and each success experience enhances the opportunity for future success. A personality built upon an adequate sequence of success experiences is relatively free of the need to harm others or act in a destructive manner. It is believed that supervisors, teachers, administrators and others involved in educational leadership are better able to provide a climate for student success and self-worth when they themselves work well together and experience success.

For educational purposes, success is not the rare or sensational victory, but a long, continuing, additive experience of little victories. This does not mean an easy educational pathway in which there are no incidental failures along the way. Learners whose self-belief has been bolstered by a long gradient of success will take risks and often attempt that for which they are unprepared. Thus, they will have far more failures than their now timid classmates. The very trying is a victory of a sort, and taken in stride, the experience is a healthy part of growing.

The first essential for success is that there be a challenge which the learner can overcome only if he applies the effort. The second essential is that the learner realizes that his abilities have been tested and that he has met the test. Each conquest builds confidence and releases energy for the next greater challenge.

It follows that the calibration of challenge, the matching of hurdle with potential, is crucial. If, for a given learner, a hurdle is set too high, there is really no challenge at all, for the only possibility is failure. If it is set too low, there is really no challenge either, for the only possibility is the humdrum repetition of what has already been achieved. However, experiments in this area indicate that the feeling of success and failure does not depend on an absolete level of achievement.

A. Self Image and Experience of Success.

Contemporary development in education recognizes the learner's objective and personal evaluation of himself as a dominant influence on his success in school. A large body of contemporary research points to the relationship between self-esteem and academic achievement. A conclusion that the successful student is one who is likely to see himself in positive ways has been verified by a number of studies. The unsuccessful student tends to perceive himself as less able to fulfill required tasks, less eager to learn, less confident, and less ambitious. According to William Purkey (1970), the indication seems to be that success or failure in school significantly influences the ways in which students view themselves. Students who experience repeated success in school are likely to develop positive feelings about their abilities, while those who encounter failure tend to develop negative views of themselves.

B. Success and Failure

There have been many attempts to improve learning and behavior by rewarding success and punishing failure. In the school, success is determined by ascertaining an average of a population and counting those as average or above, those who are somewhat below the average as passable, but those at the bottom as failures. Very often a pupil's work is appraised in terms of a single grade standard. The expectancy of some people is that pupils receiving a low score will be challenged to do better. This is true for some pupils, but for those who score low repeatedly, it is not likely to improve their learning and behavior. Studies show that experiences of failure are not likely to improve what an individual does. On the other hand, success experiences foster progress. Much of the effects of success and failure on pupil learning and behavior can be ascertained from research results cited in Pupil Failure and Non-Promotion, a 1962 Research Memo of the NEA Research Division. Some conclusions cited in the publication are:

(1) promoted children, whose achievement before promotion was as low as that of the repeaters, made greater progress than did those who repeated a grade.

(2) failure is accompanied by social and emotional strains; problems arising from difficulty with the work were almost secondary to difficulties in making friends and in teacher-pupil relationships; 40 percent of those who had failed a grade wished to quit school; only 15 percent of the regularly promoted pupils did.

(3) promoted children showed better adjustment; non-promoted children exhibited more troublesome behavior, were more inattentive, less cooperative, more easily discouraged, and worried about their failure.

(4) a child's concept of himself is altered by non-promotion in such a way that he tends to lose confidence in himself and has a much lower level of aspiration in relation both to his school work and to what he hopes to become; non-promoted children are not stimulated to do better work, but actually are influenced to set lower goals for themselves and to try less hard.

(5) non-promotion does not maintain graded school standards, reduce variation within grades, provide good motivation, enable slow learners to catch up, or bring about better adjustment in pupils; teachers' tasks are not simplified by the practice of "failing" children, but on the contrary may be made more difficult.

Research also indicates that the feeling of success or failure is, to a great extent, dependent on an individual's level of aspiration regarding a particular task. Level of aspiration presupposes a goal which has an inner structure (C.D. Frank, 1935) and it can be defined as the level of future performance in a familiar task which an individual knowing the level of past performance in that task undertakes to reach. The effect of an individual's level of aspiration in respect to a certain task helps to determine his learning and performance.

Much information has been accumulated about pupils who leave school early. Many school dropouts have negative attitudes toward school. They perceive themselves as being inept and slow. They apparently have not experienced success in an adequate amount. Studies in this area suggest that the effects of deprivation are not easily reversible. Evidence is abundant that potential school failures can be predicted and during the early school years future dropouts can be identified. Improvement of the school program relative to children's needs might help reverse the trend. Emphasis is placed upon uniform standards of achievement in many school situations. Such practices ignore the differences among children. There is evidence that many students are achieving and making much progress and for them, success is being achieved. On the other hand, there are troubled teachers, students, and parents who are concerned about unresolved problems of meeting individual differences. Success in this regard could mean fewer young offenders in the courts.

According to James Hymes in Teaching the Child Under Six, success matters very much to the under-six age group. Such children want so desperately to be able to hold their heads high that man-made failure really hurts them.

Attention should also be given to the dynamic quality of "self" in the role of motivation. The perceived "self" is the motive behind all behavior. Motivation gives both direction and intensity to behavior and motivation to learn in school gives direction and intensity to a student's behavior in a school situation. Motives relate to the "why" of human behavior and, as such, motivation is either affected by or a function of the quality, richness, intricacy, uniqueness, and complexity of stimulus material. Research studies indicate that the organism needs stimulation. When it is deprived of stimuli, the organism seeks stimuli or even makes its own. Over extended periods of time organisms which exist in stimulus-deprived environments develop lower mental abilities. Those which exist and function in stimulus environments which are rich and varied develop higher mental abilities.

Another factor which affects the intensity of motivation is the personality structure of the learner and especially his openness to experience. Those persons who are maximally perceptive, adequate, and relatively unthreatened are drawn to the new and the novel and the unknown. Those who are psychologically "closed" and have extensive defense mechanisms and perceptual barriers tend to repeal new stimuli. Openness is a function of self-concept and manifests itself especially in the response of the organism to stress or threat. The open individual is more curious, more inquiring, more excited, and more "motivated."

C. The Success-Oriented School.

Consciously or unconsciously, everyone is constantly learning something, whether it be desirable or not. Every individual is motivated to learn from his environment that which seems possible or essential to him in an effort to maintain his equilibrium or balance. Therefore, the educator's task should be focused on providing a learning environment which facilitates optimum growth for each learner. Schools should provide a learning environment which helps learners experience success, and makes growth and self-actualization possible.

Success-oriented schools extend an invitation to students to succeed in school. The advantage of an invitational framework for the success-oriented school is that teachers believe that their work is never in vain, and learners see themselves as valuable, able, and personally responsible. As stated by Arthur Combs, life is not reversible; every experience a person has, he has forever. One cannot unexperience that which has happened to him. Any meaningful experience or series of experiences may not be sufficient to produce the changes we look for. But they are always important.

The process of inviting students to succeed in school is a complex phenomenon which almost defies the framework of contemporary educational thinking. The school's invitations are difficult to divide into a neat, temporal chain of events, connected by simple casual relationships. Invitations are often ephemeral, intangible, elusive. Their influence can be so subtle, indirect and pervasive that teachers are often unaware of their effects. However, in the endless variety of messages transmitted to students, there is a certain pattern. By focusing on this order, it is possible to identify teacher beliefs and behaviors which result in student feelings of being invited, uninvited, or disinvited, by their school experiences.

The great majority of students seem to intuitively understand the feeling of being invited. Student feelings of being invited fall into one of three basic categories. They are invitations to be responsible, capable, and valuable. The following are examples.

(1) To be responsible.

"The teacher held me responsible for my behavior."

"She encouraged me to take charge of the experiment."

"The coach respected my decision."

"She treated me like I was a responsible person."

(2) To be capable.

"The teacher gave me confidence as a writer."

"She was enthusiastic about my poetry."

"He said I had the ability if I had the desire."

"I remember that my science teacher said I was a careful researcher."

(3) To be valuable.

"The teacher made me feel my ideas were important."

"She invited us to her home for a cookout."

"I could tell the counselor was genuinely interested."

"He encouraged me to make a contribution in class."

Unfortunately, some students feel uninvited or disinvited, or actively dissuaded from attending school. Uninvited students often feels overlooked in school. They are seldom encouraged to participate in school activities, seldom spend time with teachers even in the most casual personal relationships, seldom have their papers returned with comment or have their absences from school noticed.

Disinvited students are actively dissuaded from attending school and much of this dissuasion can be traced to formal school policy of suspension and expulsion. A second practice which disinvites students from school is that of labeling, grouping, and tracking. The negative consequences of labeling, grouping, and tracking outweigh the intended benefits. The danger of such institutionalized practices which diagnose and bracket groups of children encourage teachers and parents to expect certain levels of performance, and such expectations may doom certain children to educational inferiority.

Many students are disinvited by teachers who behave in ways that result in student embarrassment, frustration and failure. A disinvitation may be as unwitting as a teacher's suddenly stiffened spine when a child of another race touches a shoulder, or as elusive as a teacher's seldom calling on certain children. People have a profound influence on each other, and intentionally or unintentionally, a teacher's disinvitations are capable of producing devasting effects. Disinvited students often describe their experiences as follows:

Because I didn't bring my homework, the teacher asked me why I even bothered coming to school.

The teacher's negative attitude toward me stood out like a bump on your nose.

They put me in a dummy class, and it had SPECIAL EDUCATION printed right on the door.

A teacher asked me if I had sense enough to follow simple directions.

One student reported that she heard her teacher say to another faculty member: "That's the best the child can do."

Negative experiences can serve as a spur to future successes,but this is likely to be true only of students who do not easily accept rejection and failure. Students who fight back against failure do so only because of a history of invitations received, accepted, and successfully acted upon. Students who accept failure are usually those who have known little success in school.

Without faith in the ability of children to learn, it is very difficult for teachers to communicate invitations to students. Without faith in their own ability, it is equally difficult for students to accept the invitations of teachers.

Success has to be understood according to what the learner is trying to do and the relationship between success and his goal. The task must be real to the learner so that, if achieved, there is elation and a feeling of significant accomplishment. If the objective is not achieved, there is chagrin or humiliation and a feeling of defeat. Self-esteem may be expressed as the ratio between our success and our pretension.

D. The Outcomes of the Effects of Experiences of Success on Learning and Behavior.

Traditional concepts of what the education process should be run counter to scientific knowledge of how children develop and learn. Findings show that traditional procedures are not always effective in practice and often are detrimental to a child's learning and adjustment.

The effects of success on learning and behavior can be summarized as follows:

An adequate person tends to perceive man as growing, dynamic, creative, continuously in search of adequacy;

A person's concept or image of himself is an index to his feelings of success or failure. His feelings about himself affect his learning and performance wherever he is. A positive self-image is important in the development of a fully functioning adequate personality;

Adequate persons see themselves as persons of dignity and integrity, of worth and importance. On the other hand, persons who do not feel successful see themselves as unliked, unwanted, unworthy unimportant or unable; they are the persons who fill our jails, our mental hospitals, and our institutions;

The concept of self is learned. People learn who they are and what they are from the ways in which they are treated by those who surround them in the process of growing up. To produce a positive self, it is esential to provide experiences that help individuals become positive people;

To understand the relationship between motivation and the experience of success is important. Motivation gives both direction and intensity

to human behavior in an educational context. Motivation to learn in school gives direction and intensity to student behavior in a school situation;

It appears doubtful that anybody is "unmotivated." But what he feels motivated to do will depend on how he perceives his experiences;

The organism needs stimulation. When it is deprived of stimuli, the organism seeks stimuli or makes its own;

Failure tends to increase failure;

Social and emotional adjustments are increasingly difficult for students who experience failure. Problems arising from difficuluty with the work are secondary to difficulties in making friends and in pupil-teacher relationships;

Many school dropouts have negative attitudes toward school. They perceive themselves as those who are inept and slow. Apparently they have not experienced success in adequate amounts;

Some school practices tend to foster development of negative attitudes (A-B-C-D report cards, single grade standards);

A great task of the teacher is to help each student gain a positive and realistic image of himself as a learner; and

In building such an image, love and caring are significant to learning and behavior in the same way that success is, and must be provided along with success to provide a total environment conductive to human growth.

# What Are the Best Predictors of School Achievement--
# Mental Age, Chronological Age, or IQ?

**A Review of Research**

**Submitted to**

**The Sub-committee of the House Education Committee**

**And Senate Education and Health Committee**

**By**

**Lorraine R. Abernathy**

**M.Ed. Candidate, Virginia Commonwealth University**



November 27, 1978
30 Willway Avenue
Richmond, Virginia
23226

Section 6 of Appendix E

## What Are the Best Predictors of School Achievement-- Mental Age, Chronological Age, or IQ?

The purpose of this review is to ascertain the best indicators of school readiness through a study of research connected with readiness and school entrance policies for kindergarten and first grade children.

David Ausubel (1959) distinguishes between readiness and maturation. "The concept of readiness," he states, "simply refers to the adequacy of existing capacity in relation to the demands of a given learning task."

"Maturation, on the other hand, has a different and much more restricted meaning. It encompasses those increments in capacity that take place in the demonstrable absence of specific practice experience." Ausubel concludes that "maturation, therefore, is not the same as readiness but is merely one of the two principal factors (the other being learning) that contribute to or determine the organism's readiness to cope with new experiences." (Ausubel, 1959)

At what time in a child's life is he ready to cope with new experiences in a school environment? At present most school systems in the United States use chronological age as an arbitrary determiner of school readiness. Chronological ages for school entrance vary from state to state. The emphasis on early childhood education in the last few years, coupled with intensive studies of child growth and development (Piaget, Gesell, and others), have precipitated nationwide debate on the issue of when a child is ready to enter a formal education environment.

At one end of the spectrum the state of Alaska commissioned its State Department of Education to do an intensive study on "The Optimal Age for School Entrance" (Madden, 1974). The Alaskan Task Force concluded from research that early schooling was not warranted for the preschool child (birth to 6 years of age) and that school programs designed for children ages 6-8

should focus on development of readiness skills. Children younger than 6 should be at home. The Task Force also stressed that the state had sufficient social service agencies to meet the needs of these younger children and that the Department of Education need not feel compelled to provide programs for children before formal school entrance.

At the other extreme is the California Task Force report (Riles, 1971). One of its goals was "to bring about the maximum development of every child" down to the age of four. State Supt. Riles was engaged in debate by Raymond S. Moore, and others, of the Hewitt Research Center, who claimed that the California Task Force failed to show how research supports its plan. "In fact, certain research quoted in the report actually contradicts the Task Force's conclusions that schooling under carefully selected teachers is desirable for all four year olds." (Moore, Moon, Moore, 1972)

Arthur Jensen, in an O.E.O.-sponsored Occasional Paper on understanding readiness, said, "The age for readiness for some particular learning is rarely confined to a single point on a developmental scale for any given child." The speed and thoroughness of learning will be different for each child, though the same methods of teaching are employed for all children of the same chronological age. "Many school learning problems could be circumvented if more attention were paid to readiness in the primary grades. . . The risks of delaying instruction too long seem much less than the possible disadvantages of forcing instruction on a child who is still far from his optimal readiness for the subject of instruction." (Jensen, 1969)

Of the measurable determiners of readiness, chronological age, mental age, IQ, gross and fine motor development, and visual and auditory development, we will focus on research into the first three: chronological age (C.A.), mental age (M.A.), and intelligence quotient (I.Q.)

One of the oldest, yet currently most quoted, studies on "School Progress

of Under-Age Children" is Elizabeth Bigelow's research using 88 children who entered Grade 1 before C.A. 6-0 and another group of 39 children who entered Grade 1 when they were between C.A. 6-0 and 6-4. I.Q. scores for both groups were calculated as the average of two administrations of the Kuhlmann-Anderson Intelligence Tests (given once in Grade 2 and once in Grade 4). Before entering Grade 1 all children were given a Binet test by the kindergarten teacher. Bigelow found that:

1) A child with C.A. between 6-0 and 6-4 with I.Q. of 110 or over was practically certain to succeed in school.
2) A child with C.A. less than 6-0 with I.Q. of 120 or over will probably succeed, but personality factors should also be considered.
3) A child with C.A. less than 6-0 with I.Q. less than 110 has small chance of success.
4) Children with C.A. less than 6-0 with I.Q. 110-19, inclusive, and children with C.A. 6-0 to 6-4 with I.Q. 100-09, inclusive, have a fair chance of success, with careful consideration being given to their social, emotional, and physical development.
5) A child with C.A. less than 6-0 with M.A. 6-10 or above is practically certain of success. If his M.A. is between 6-8 and 6-9, inclusive, he has a good chance of success.
6) A child with C.A. between 6-0 and 6-4 with M.A. 6-4 or above has a good chance of success.
7) A child with C.A. below 6-4 with M.A. below 6-0 has practically no chance of success.
8) A child with C.A. below 6-0 with M.A. between 6-0 and 6-7, or a child with C.A. between 6-0 and 6-3, inclusive, has some chance of success if he is sufficiently mature physically, socially, and emotionally.

She also found that of the 88 entering Grade 1 with C.A. less than 6-0, 43 (49%) were subsequently judged by teachers and principals to be unadjusted in some way. Among the older group of 39, there were 7 unadjusted (18%), thus indicating that the older the age of entrance, the better the personality adjustment. (Bigelow, 1934)

William Hedges, of the Florida Educational Research and Development Council, suggests that for children of normal intelligence a C.A. of 6-6 is recommended for school entrance, and that earlier or later entry should be determined by how well a child would perform in relation to normal C.A. 6-6 children. He quotes Brenner and Stott (1971): "The longer a child has lived,

the more he has had contact with reality and has accumulated knowledge and experiences. The longer he has lived, the greater are the chances that he has developed or perfected his physical and cognitive skills. The older the child, the more he will have developed emotional security, independence, social responsibility, task orientation, and motivation to learn. . ." Hedges says that though no minimum mental age has been established, it is clear that M.A. 6-6 should be the minimum for the majority of children, other factors being comparably developed. He cites several supporters of M.A. 6-6, including Bigelow, Hildreth, DeVault, and Moore and Moore. (Hedges, 1976)

As further evidence of the strength of M.A. in gauging development, two studies using performance on Piagetian tasks to determine developmental or behavioral age (McClain, 1972; Jordan and Jordan, 1975), found that it was preferable to index the relationship between Piagetian and standardized intelligence tests in terms of M.A. It might be expected that from the standpoint of Piagetian theory C.A. would be a stronger indicator of developmental maturity, but Jordan and Jordan found that overall correlations for I.Q., M.A., and C.A. were .36, .51, and .38 respectively, indicating that correlations between Piagetian tests and M.A. are likely to be higher than the correlations with either I.Q. or C.A.

Joseph Braga sent questionnaires to 5% teachers in Grades 1, 3, 5, and 7 in Lexington, Mass., asking their opinions of early admission to school. Of those who responded, 35% were favorable to highly favorable, while 65% were neutral to unfavorable. In giving their reasons for negative responses, the teachers in the latter, larger group stated that the very young had been unsuccessful in their classrooms because of lack of social, emotional, and physical maturity; they needed more supervision; they were unable to cope with class routine; they did not finish assignments, tired easily, were quite restless; had greater difficulty with social adjustment in later grades; were

unable to work independently, and were frustrated by competition with older children. Braga stated, "Mental age is more closely related to school achievement than chronological age is. Kazienko (1963) found that the coefficient between mental age and school achievement was so high that the addition of I.Q. and C.A. was not highly significant. Others who favor M.A. as a criterion for school admission and cite it as a predictor of success in school include Hobson, Stake, Hildreth, and Partington." (Braga, 1971)

In a study of 100 Austin, Texas, children in grades 2-6, 50 entering school with C.A. 6-0 or over by September 1, and 50 entering with C.A. less than 6-0 by September 1, the underage pupils having been matched with normal age pupils by sex and equal I.Q. (measured by New California Short Form Test for Mental Maturity at the primary level), Lowell Carter came to the following conclusions:

1) The chronologically older child appears to have the advantage in academic achievement over the younger child when given the same school experiences.
2) In general, the degree of scholastic achievement attained on the first achievement test tends to remain constant throughout the elementary school years.
3) The underage pupils making lower scores on first achievement tests did not overcome this inferior position during the rest of elementary school.
4) C.A. has more effect on boys' academic achievement than on girls'. The underage boys made lower scores and fewer high scores than the underage girls.
5) Factors other than C.A. and intelligence appear to have operated when the underage children had academic achievement equal to or superior to normal age children.
6) Conversely, factors other than intelligence and C.A. in normal age children seem to retard normal academic achievement.
7) In the subject areas most effectively taught, the coefficient of significant difference tends to rise sharply, ex. in spelling, reading, and English the academic achievement of normal age girls was very significantly higher than that of underage girls.

Carter's data showed that 87% of underage children did not equal the scholastic achievement of normal age children. (Carter, 1956)

The Nassau County, N.Y., Elementary Principals' Association requested an investigation of entrance age, grade placement, and promotion policies within

the county's schools. Thirty-three kindergartens, with an enrollment of 4,277, were included in the study. A C.A. of 4-9 by September 1 was deemed the minimum desirable kindergarten entrance age for study. It was found that 16.5% of all the children in these schools were underage. 76% of this underage population (16.5% of the whole) made a ready adjustment in kindergarten as contrasted to 94% of those over C.A. 4-9 who made ready adjustments. The principals' statements indicated that 24% of the underage children had difficulties while 6% of normal age children did. Eleven of the 33 schools indicated that they required some form of mental test for children admitted underage, insisting that these children meet a September M.A. of from 4-7 to a high of 6-0 (policies were not standardized within the county.) Of the Nassau County principals, 22 believed that C.A. 4-9 was the best entrance age, while 21 opted for C.A. 5-0 or more. (Hamalainen, 1952)

Again, concern of school administrators and teachers, who felt that many children entering school before C.A. 5-0 were too immature to be there, led Clyde Baer, of the Kansas City, Missouri, Public Schools, to follow two groups of 73 children each through eleven years of school. One group of 73 children began school with dates of birth in November and December. The other group of 73 had dates of birth in January and February of the same year. (November 1 was the cut-off date for school entrance, though with an M.A. of 5-0, a November or December child could enter.) Children were matched on the bases of I.Q., sex, and, in all but two cases, on the schools entered. Testing instruments used were the Revised Stanford Binet, Form L given at kindergarten entrance or during the regular school year, Guilford-Zimmerman Temperament Survey, and SRA Youth Inventory, given in eleventh year of school. Other pertinent data collected from cumulative records were comparisons of marks in elementary and secondary school subjects, achievement test scores, teacher ratings on personal traits, and number of absences.

Baer found that after eleven years the overage group had been significantly (at .01% level) more successful in maintaining progression from grade to grade than the underage group. From kindergarten to Grade 8 the overage children received higher marks, and in high school their marks were also higher than underage. Achievement test scores showed the overage group achieving significantly higher scores in reading (grades 3,6, and 8), arithmetic (grades 4,6, and 8), and social studies (grade 5). The overage group scored significantly higher on teachers' ratings at ends of year in measured participation in group activity, attitude toward school regulations, appearance, dependability, emotional stability, initiative, and co-operativeness. Baer concluded, "Although there is some evidence that the differences between the overage and underage students tended to decrease with higher grade levels, perhaps this is what should be expected since the advantage in mental age that the overage group carries in the elementary school grades tends to decrease as the students get older." It should be noted that the underage children scored average in all areas, but all children (overage and underage) began with a better than average I.Q., the average for each group being 111. (Baer, 1958)

Using the Iowa Test of Basic Skills (ITBS) composite score to measure achievement, Dickinson and Larson tested 480 fourth graders attending Sioux Falls Public Schools. Their purpose was to determine the effects of C.A. at the time of entering school on later school achievement. A C.A. of 6-0 by November 1 was the system's entrance age. The children were divided into Group I--entered Grade 1 before C.A. 6-0 or became 6-0 before November 1; and Group II--entered Grade 1 at 6-0 or over. Dickinson and Larson used two approaches: a) they compared the younger fourth of the class to the remainder of the class; b) they divided the class into 4 groups on basis of age, then compared the youngest fourth to each of the remaining three groups. Their hypothesis was that those children who were younger in C.A. would differ in

achievement from the older children.

They found that the younger fourth had a significantly lower mean composite score (4.73) than the rest of the class (4.9) ($p < .05$). I.Q. could not account for the older group's higher score, as the younger group had a higher mean I.Q. Mean M.A. was significantly higher for the older age group: 127.03 months, as opposed to mean M.A. 122.34 months for younger group ($p < .01$). The fact that these differences still exist in the 4th grade may point to a "snowballing effect," the differences that existed in early ages may become magnified as a child becomes older. "It appears that mental age may be a much better predictor of achievement than I.Q. at the fourth grade level. As mental age increases, so does achievement on the ITBS. I.Q., on the other hand, tends to decrease." (Dickinson and Larson, 1963)

A study of inner city children's adjustment and achievement based on school entry age was reported in a dissertation by William Evans, University of Connecticut. He classified 304 inner city children, observed by randomly selected fourth grade teachers, by age at entry into kindergarten and by sex. Evans' criteria for selection were 1) a child who began kindergarten in the school system in which the present study was conducted; 2) his birthdate fell into one of three 2-month bands qualifying him as an early, average, or late entry; 3) English was the primary language spoken in the home. Evans found that on adjustment variables the early entry group scored highest on Behavior Problem Checklist, indicating more behavior problems. Statistically significant comparisons were between early entry and later entry pupils on conduct ($p < .001$), on inadequacy-immaturity ($p < .001$), and total score ($p < .001$), with males showing more problems. On achievement variables, interactions between sex and entry age were significant ($p < .05$) with later entry females scoring higher than most other groups. (Evans, 1975)

Green and Simmons (1962) reviewed studies of chronological age and school

entrance and found King's study (1955) on the effect of age of entrance into Grade 1 upon achievement to be a telling one. They quote King's conclusion that "having attained a few additional months of chronological age at the beginning of Grade 1 is an important factor in a child's ability to meet imposed restrictions and tensions that the school necessarily presents. Younger entrants will have difficulty attaining up to grade level in academic skills, and a larger portion of them may fall far below grade level standards."

Using a 2-path walk-through maze and successive trials, Kolesar and Black (1976) tested three groups of nursery school children on spontaneous alternation behavior (that pattern of behavior occuring when one is given two successive trials in a 2-choice situation where the reinforcement contingencies are the same for both choices and the second trial response is the opposite of that on first trial.) Their purpose was to investigate the effects of both C.A. and M.A. on spontaneous alternation behavior. They concluded that "mental age or some measure of general cognitive development is a more meaningful predictor than chronological age as to a child's tendency to seek out and approach varying stimulation, a characteristic presumably related to one's ability to process information efficiently." (Kolesar and Black, 1976)

As to the effect of school entrance age on reading readiness, Diane Jones of O.D.U. reported to the Spring, 1978, meeting of the Virginia Association for Early Childhood Education that chronologically older children have an advantage over younger children in reading readiness at the beginning of first grade. The chronologically older children appear to maintain their superiority in subsequent reading achievement at the end of first grade. Her findings came from a study of 400 first graders, 200 younger than C.A. 5-0 at school entrance, and 200 older than C.A. 5-0. Her data, acquired by using the Reading Test of the SRA Achievement Series, Primary I, Form E, showed that 16% more young than old pupils scored below the 50th percentile; 6% more old than young attained a high

readiness performance rating; 14% more old than young attained an average performance rating; and 20% more young than old attained a low performance rating. Data on reading achievement at the end of first grade at the .05 and .01 levels showed 14% more young than old pupils scoring below the 50th percentile. (Jones, 1978)

Much integrity is attached to the work done by Arnold Gesell and carried on by Frances Ilg, Louise Ames, and others at the Gesell Institute in the area of child growth and development. The Gesell Institute has been involved in many projects to assess developmental readiness, behavioral age, and optimal age for school entrance. Ilg and Ames (1965) tested a Connecticut school population of 81 kindergarten children, 26 first graders, and 31 second graders in the fall of three successive years using the Gesell Developmental, Visual, and Projective Tests.

Their purposes were four: 1) to determine whether or not a substantial number of each school class, entering school on the basis of C.A. alone, might not be overplaced; 2) to determine whether or not test findings were consistent from year to year in predicting readiness or non-readiness; 3) to determine whether or not results of the three different types of tests agreed with each other; and 4) to determine whether or not, based on a battery of behavior tests, a prediction could be made in the fall of any given school year as to a child's readiness or non-readiness for the grade in question which prediction would agree with the teacher's evaluation (made the following spring) as to whether or not the child had been ready.

Their results were: 1) a large percentage of the population were "unready" for the assigned grade (assigned on basis of C.A.) On Developmental Test ratings in only first grade and on the final test for the kindergarten group were as many as 50% of subjects judged "ready" for assigned grade. On Visual Test ratings 44% to 68% were "ready." 2) There was high consistency in findings, on any one

test, from one testing situation to the next--Developmental Tests, 78% to 95%; Visual Test, 73% to 81%; Projective Test, 70% to 91%. 3) When the three examiners reviewed their findings, there was considerable correspondence found in results from one test to another. 4) Correspondence with test predictions and teachers' ratings were reasonably high for kindergarten, with agreement decreasing with added age and higher grade placement--83% agreement in kindergarten; 68% agreement in first grade; and 59% agreement in second grade.

It was concluded that dividing the subjects into three groups (ready, questionably ready, and unready), the ready group were slightly older than the questionable group and of a slightly higher intelligence than the questionable or unready. "It appears from present findings that grade placement of children in kindergarten and primary school on the basis of age alone results in marked overplacement of from one-third to one-half of the pupils in any single class. Thus a need of some more effective measure of school readiness than chronological age alone seems indicated. . . It seems apparent that a careful developmental examination of each individual child before school entrance might prevent a large percentage of the overplacement that results from dependence on chronological age alone as a measure of readiness for kindergarten or first grade entrance." (Ilg and Ames, 1965)

Believing strongly that readiness for school and subsequent promotion must be based on a child's behavior age and not merely his age in years or level of intelligence or reading ability, Ilg and Ames in their book School Readiness (1978), state, "We ourselves go so far as to believe that perhaps 50% of school failure could be prevented or cured by having every child in the grade for which his behavior age suits him." (pp. xi,xii) They continue, "We must face the fact that no single group (parents, teachers, administrators) is all for or all against having children ready before they start to school. It requires teachers, parents, and administrators all working together to see to it that all children

in a system are placed where they belong in school." (p. xiii) Ilg and Ames make their plea for individual examinations in light of differing cut-off dates used by school systems in the United States. "Fortunately, many states are appreciating the importance of the child having age on his side. States that have a September 1 cut-off date do their children a real service. Some states, however, have a cut-off date as late as January 31.

"And even with a September 1 cut-off date there are many children who are still behind and need extra time--six months, 1 year, or even two. That is why each child needs to be examined individually." (p.17)

Ilg and Ames offer some generalizations arrived at from their years of working with children who are having trouble in school. These conclusions, based on careful study, offer insights into age- and development-caused school difficulties.

"1. Boys in the early years develop more slowly than do girls, the lag amounting, as a rule, to about 6 months in the age zone of 5-7 years.

2. Even without a developmental examination, chronological age gives some clues as to possible readiness for school. We like to see girls fully 5, boys 5 1/2 before they start kindergarten; girls fully 6 and boys 6 1/2 before first grade.

3. Children younger than this should be carefully screened to make sure they are ready to begin kindergarten (or first grade), even when the law permits such early entrance.

4. Girls whose birthdays are in September and October should also be carefully screened to determine if they might not be ready for the grade in question, even though they miss a September 1st deadline (when such exists.)

5. Some boys need to progress 18 months more slowly than the average. At this slower rate they may be expected to keep up with a regular class group.

6. Few boys, or girls, who are more than 2 years behind can be expected to keep up with a regular class group. Such children need to be sidetracked into a special group in which they can receive individual attention and can progress both at their own rate and through their special interests.

7. Certain children who are advanced intellectually and who score high on both reading and achievement tests may still be functioning at an immature level and may need to progress at a slower rate than their chronological age would suggest.

8. A kindergarten teacher's judgment about a child and his readiness should be listened to, since most such judgments correlate very well with developmental findings.

9. Any parent who wishes a child to go at a slower rate should be listened to. No parent wishes to hold a child back without good reason. Therefore, it may be assumed that real evidence of immaturity lies behind such a parental request.

10. The educator should, within reason, hold to his own decision about keeping a child back and should try to convince the parents of the wisdom of such a move if they should question it, as some do. When an educator feels that a child should be held back, the evidence for this feeling is usually quite strong. However, if a parent absolutely refuses to go along with the school's decision to retain a child, it is usually best not to insist.

11. Decisions should be made as problems arise. If a child needs to be replaced, this change should not be delayed till the end of the year, or until some future year, especially in the early grades. Educators are too apt to put up with bad situations, hoping for a change for the better." (pp. 18&19) (Ames and Ilg, 1978)

The Gesell Institute offers its Developmental Placement Program as a model for screening and properly placing children during their primary school years. They suggest a possible three-step program before first grade: pre-kindergarten, kindergarten, and pre-first grade. All applicants would be screened before kindergarten entrance by means of the Gesell behavior examinations, with tests again administered the following spring to determine what their correct placement should be. The Developmental Placement Program has four requirements for utilization: 1) a developmental philosophy which maintains that behavior develops in a patterned, predictable way and that any child needs to have reached a certain level of maturity before he or she will be ready for the work of any grade; that the level of an individual's own behavior development will determine the level at which he is performing and the school grade for which he is suited. 2) There must be developmental examiners for testing before kindergarten entrance through second or third grade. 3) There must be a willingness by parents and teachers and administrators to have any child who was inadvertently overplaced repeat a grade (italics theirs). 4)There is an essential understanding necessary that a high I.Q. must not be confused

with readiness to start school or for subsequent promotion. The Gesell test battery is included in School Readiness in "The Developmental Examination" section. (Ilg and Ames, 1978, pp. 11-12)

Gwynette Caruthers, director of special programs for Cheshire, Connecticut, Public Schools, called upon the Gesell Institute for advice in meeting the individual needs of preschool and primary students. Her study was partially funded by Title III. The Cheshire study employed trained examiners to test children for maturity. Dr. John Streff, of Gesell's optometric staff, helped teachers find common methods to help underachievers through a perceptual approach. A half-step program was set up encompassing pre-kindergarten, kindergarten, and a readiness section for first grade. The children could move from section to section at any time according to their behavior age, not chronological age. The results of the Cheshire study were the institution of half-step classes, increased sensitivity to changing maturity levels, and lack of need for remedial teachers, who were then freed to work with learning disabled children. (Caruthers, 1972)

Another study that resulted in a half-step adaptation was done by Wenig and Brown (1975) at the Wheelock Lab. School of Keene State College, N.H. Their concern was those children finishing kindergarten but not quite ready for first grade. The researchers' recommendation was a pre-primary or readiness class after kindergarten. The population for the class were identified by teacher observations and standardized tests. Behavior objectives that could be measured were established: developmental skills--auditory, kinesthetic, visual, verbal; affective skills--concepts of leadership, meaning of friendship. Once prescriptions were made for each child, the children worked in groups of five or six. At the end of the year one-third of the not-quite-ready children were reading. One-third needed some help in reading, while the remaining third needed a lot of help. Three-fourths of the children showed acceptable

behavior changes.

There appears to be an obvious need for pre-kindergarten screening before a child enters a formal school environment. Screening can be formal and tied in to program placement; or less formal, with recommendations made to parents about their children's present readiness level. Kephart cites the latter, less formal type of screening used in the Flagstaff, Arizona, Public Schools. When Flagstaff parents register a child for kindergarten, they are given an appointment to bring him back in June to participate in a screening clinic staffed by five certified elementary school counselors, a school nurse, and an aide (the latter two people screening for auditory and visual problems, with referrals made to doctors where indicated.) Two simple tests for academic readiness (names not stated in article) are administered along with evaluations of fine and gross motor abilities. After the screening a conference is held with parents to determine whether the child should be held out a year, or suggestions are given if a child may be helped to get ready for kindergarten. When maturation is involved, counselors explain in a non-threatening, non-critical way that the child is not ready for school experience and should be given another year at home. Parents are not bound by this recommendation; however, many follow the advice and say they are glad they did. (Kephart, 1974)

The number of valid, easily administered kindergarten screening tests appear to be few. Janson (1974) studied the Wescott-Felton Pre-Kindergarten Survey (WFPKS) on a sample of 289 students and found that it correlated significantly with the Stanford Achievement Test, Primary I Battery-Form X (SAT) in predicting academic success and social and emotional development at the end of Grade 1.

Telegdy (1976) studied the results of the Screening Test of Academic Readiness (STAR) and the results from the Peabody Picture Vocabulary Test (PPVT) as to STAR's validity in predicting first grade academic achievement. While STAR proved to be an adequate predictor, Telegdy recommended PPVT in preference to it

The Hayes Early Identification Listening Response Test (HEILRT) is a recent test developed by Marjorie Hayes, Frankfort, Kentucky, to screen young children for readiness, rapidly, by using tasks of the type with which children beginning school are usually familiar. Two studies on the validity of the test (Buttram, Covert, Hayes, 1976; and Hayes, Mason, Covert, 1975) indicate the HEILRT to be highly usable and valid. It correlated with Metropolitan Readiness Test scores highly positively, .79. The HEILRT contains a series of psychomotor tasks with verbal instructions and can be administered to as many as 30 children in a period of 20 mimutes.

The validity of the Vane Kindergarten Test (VKT) was questioned by Powers (1974) in a study using Connecticut suburban children. Powers found that the VKT, taking 10 minutes to administer and 5 minutes to score, met the requirements of a preschool screening device in that it could be quickly and efficiently administered before children enter kindergarten. Her study found that all means on the VKT were significantly greater ($p < .01$) than those reported by Vane in 1968.

There is great interest at present in determining when a child is ready to enter a formal school environment. The major factors influencing school readiness include maturation and learning. Evidence indicates that more attention should be given to a child's readiness in the primary grades. Some researchers state that the longer a child lives and grows, and the more he experiences before school entrance, the better his chances of achieving success academically and emotionally when he enters school.

Studies of kindergarten and primary achievement indicate that of the three measurable indices of development--I.Q., chronological age (C.A.), and mental age (M.A.)--chronological age is the least accurate; mental age the most accurate. If C.A. alone is to be the determiner of school entrance, a

C.A. of 5-0 at school entrance would be preferrable to a child's becoming 5 years old after school entrance. However, performance on Piaget-modeled tests indicates that M.A. correlates higher than I.Q. or C.A. Studies investigating emotional adjustment and continuously high academic achievement favor the child with a higher M.A. and C.A. over younger entrants with equally high I.Q.'s.

To insure the best climate for achievement Ilg and Ames of the Gesell Institute of Child Development recommend screening all school applicants to determine their "behavior age." They recommend that programs should then be devised to meet the various developmental levels--pre-kindergarten, kindergarten, pre-first, and first grade. Other researchers recommend testing those within admissable age limits and placing children according to their readiness level, or at least counselling parents of those found unready for school entrance.

In formulating admissions criteria, the weight of research evidence is clearly in favor of admitting older, readier children. Their chance of success academically and emotionally in a school setting is considerably greater when their readiness, as measured in mental age, is higher. It would seem evident that to require greater accountability in upper grades would also require accountability at every stage of the educational process, beginning with admissions policies and programs.

**Reviewer's Recommendations**

An agency considering school entrance age would be advised to think about a three-pronged program to deal with early childhood education: 1) raise the entrance C.A. to 5-0 by September 30; 2) screen all kindergarten applicants for placement; 3) provide programming to meet the needs of the developmental levels of those entering, which might include a 2-year pre-kindergarten and kindergarten program for some children.

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LONGWOOD COLLEGE FARMVILLE VIRGINIA 23901
1839

DEPARTMENT OF EDUCATION AND PSYCHOLOGY
804/392-9341

December 4, 1978

The Honorable Dorothy S. McDiarmid
390 Maple Avenue
Vienna, Virginia 22180

Dear Mrs. McDiarmid:

Please find enclosed a list of summary statements from research, nationally recognized authorities and textbook authors with regards to your requested information concerning early childhood education. The enclosed summary statements center around the parameters you outlined:

class size
length and scheduling of the school day
maturation levels
organizational patterns
teacher responsibilities

In those areas where I was not sure of the exact facts you were seeking, I used value judgments.

You may be interested in knowing that Virginia's current early childhood teacher education certification pattern is based on the curriculum I developed for Longwood College. Needless to say, I am very much interested in the conclusions drawn by your committee. Should you need additional assistance, even to the point of addressing your committee with regards to my views, please feel free to contact me.

Si cerely,

obert Lee Banton, Ed.D.
Professor of Education

RLB/dh

Robert L Blanton, Ed.D.
12-4-78
Longwood College

What relationships exist between school success and the length and scheduling of the school day?

1) In the first study, two groups of kindergarten children were tested. One group received ½ day of kindergarten daily; the other group received a full day of kindergarten on alternate days. The Cognitive Abilities Test (CAT) was administered to each of the two groups. CAT turned up "non-significant differences between the two groups. Opinion surveys from principles, teachers, and parents showed the largest factor for consideration to be the child's maturation level. Large motor and social skills were more easily taught in alternate full-day; language arts skills and art in a daily program. Considering all variables, it was concluded that the type of program was not the contributing factor for its success. It was concluded that not every child will adjust to an all-day program.

Mouw, Annabelle J. "The Description and Evaluation of the Alternate Day--Full Day Kindergarten Program". ERIC. February, 1977. Volume 12, Number 2.

2) Two pilot studies were conducted in a large suburban district from four of the seventeen elementary schools. Two of the kindergartens tested were middle class and two were lower class but able to receive Title I fundings. Both extended groups participated in regular programs in the morning and received extra a ninety-minute period of structure. "Results favoring the experimental over the control groups were apparent at the end of the kindergarten year, most noticeable in the educationally disadvantaged sample."

Winter, Mildred and Klein, Alice E. "Extending the Kindergarten Day" Does It Make A Difference in the Achievement of Educationally Advantaged and Disadvantaged Pupils?" ERIC. June, 1974. Volume 9, Number 6.

3) In this evaluation study, two groups of children who attended kindergarten either full-day on alternate days of one-half day every day were compared. Data was collected on these 96 children during the last two weeks of the 1971-72 school year. 48 were in each group. "Results of the study showed that the two groups were similar on the measure of broad readingss experiences, and they were dissimilar on two of the pre-academic skill measures. Children who had attended kindergarten daily had significantly higher test scores on tests of ability to name numerals 1 to 10 and on knowledge of the sounds of letters of the alphabet. There were no significant differences on the Caldwell Preschool Inventory. On all measures, the children in the full-day alternate-day programs had lower scores and greater group variability.

Minnesota State Department of Education, St. Paul. "Kindergarten Evaluation Study: Full-Day Alternate Day Programs". ERIC. April, 1973. Volume 8, Number 4.

4) This study briefly describes an extended day kindergarten program designed to provide a well-rounded curriculum stressing cognitive, social, and physical development; a longer period of time daily for the child in school (four and a half to five hours instead of only three); and greater opportunity for the establishment of parent-teacher relationships. "The three plans used in organizing the extended day schedule are delineated. General information on grouping, use of teacher aides, and the establishment of the parent-teacher relationships is included in this study."

Ferguson-Florissant School District, Ferguson, Mo. "Expanding Early Education: The Extended Day Kindergarten". ERIC. October, 1975. Volume 10, Number 10.

What relationships exist between schbol success and maturational levels?

1) "Kindergarten children will be different at the end of the school year from what they were at the beginning. They will be better able to do what they have been doing, and they will be able to do more things than they have previously done. In part, this difference in abilities will be due to maturation, or growth... The extent to which expected changes are achieved is a measure of the success of the teaching."

Heffernan, Helen and Todd, Vivian E. The Kindergarten Teacher. D. C. Heath and Co.: Boston. 1960. p. 7.

2) "This report is an effort to provide the information on school district practices during the 1972-72 school year on early admissions of children to kindergarten...Selection criteria were birthdate cutoff, physical maturity, emotional and social maturity, academic skills, appropriate pupil behaviors, preschool experiences, and mental age. Six issues which need some additional consideration are included in this study: Previous studies in early admission, necessary research design, age as a criterion, children for whom early admission should be considered, the effect of the school program on early admissions, and issues concerning readiness."

Minnesota State Department of Education, St. Paul. "Early Admission to Kindergarten: Practices of Minnesota School Districts, 1972-72; Issues to Consider; Questions to Ask". ERIC. December, 1974. Volume 9, Number 12.

3) "Findings revealed that earlier entry age children (children who were comparatively young when they started school) scored highest on the conduct subtest of the Behavior Problem Checklist, indicating more behavior problems; average age children scored second highest; and, children in the later entry age the lowest. These indicate higher behavior problem scores among earlier age children. Comparisons which reached statistical significance were between earlier entry age and later entry age groups on the conduct subtest, and between sexes on the conduct and inadequacy-immaturity subtests, with males manifesting more problems than females."

Evans, William R. "School Entry Age and Future Adjustment of Inner City Children". ERIC. March, 1975. Volume 10, Number 3.

4) "This study was undertaken to determine the possiblity of a relationship between the selected traits of cognitive ability, conceptual development, emotional maturity, and perceptual-motor development in disadvantaged kindergarten children, since the knowledge of the relationship between traits might make it possible to strengthen a child's deficiencies in one are through training in a related area. A significant positive correlation between each of the selected traits was found."

Corwin, Shelia. "The Relationship Between the Cognitive, Conceptual, Emotional, and Perceptual-Motor Development in Disadvantaged Kindergarteners". ERIC. July, 1977. Volume 12, Number 7.

5) "Boys normally do better on spatial and visual problems while girls excel on tests of verbal ability....Early maturers perform better on verbal tasks, while late maturers do better on visual

and space-perception problems. This researcher also reports on Boston psychiatrist Deborah P. Waber's idea that sex differences in mental ability are related to differences in brain organization, which in turn reflect different rates of physical maturation."

Casady, Margie, "Maturation--A Factor in Verbal and Spatial Learning". Psychology Today. 10:44 October, 1976.

What relationships exist between organizational patterns and school success in the kindergarten?

1) "Cognitively oriented curriculum model provides home and school experiences with learning materials derived from the theories of Piaget."
Leeper, Sarah H., Dales, Ruth J., Skipper, Dora S., and Witherspoon, Ruth L. Good School for Young Children. Macmillan Publishing Co. Inc.: New York. 1974. p. 126.

2) "A creative curriculum is a purposeful curriculum."
Marbach, Ellen S. Creative Curriculum K - Grade 3. Brigham Young University Press: Provo, Utah. 1977. p. 3.

3) "...motoric training is necessary for development of reading readiness skills..."
U. S. Department of H. E. W. - Office of Education. "The Learning Called Psychomotor" by Tom Banville. American Education. 12:23-26 July, 1976. p. 23.

4) "What has made the psychomotor program work thus far has been the enthusiasm and the inventiveness...At an average cost of less than $50 per child per year for psychomotor education, the program is affordable."
Banville, Tom. "The Learning Called Psychomotor". American Education. U. S. Department of H. E. W. - Office of Education. 12:23-26 July, 1976. p. 26.

5) This study was a three-year study, involving twenty five-year olds in full and twenty five-year olds in one-half day programs of kindergarten. There was an equal sorting of cultural disadvantaged children, economically disadvantaged children and middle class children. "Results indicated no statistically significant differences. When achievement tests were given alone, there was still no significance, indicating that full-day kindergarten does NOT provide special academic benefit to culturally disadvantaged children".
Johnson, Edith W. "An Experimental Study of Comparison of Pupil Achievement in the All Day Kindergarten and Half-Day Control Group". ERIC. April, 1976. Volume 11, Number 4.

6) "The primary purpose of this study was to test the implication that perceptual-motor development training will increase school readiness at the kindergarten level. Sixty children were rando assigned to groups and tested. The experimental groups were giv a structured, sequential program of perceptual-motor development skills. A physical education program based on low-organized activities and a kindergarten readiness program were given to the control groups. The hypotheses of the study stated that a structured, sequential, perceptual-motor development program would demonstrate significant gains for the experimental groups in (1) academic achievement, (2) mastery of basic skills, (3) gross motor skills, and (4) fine motor skills. The analysis of the results showed that all four of the hypotheses were unsupported."
Klanderman, John Winston. "A Study of the Effects of a Kindergart Program of Perceptual-Motor Development". ERIC. May, 1973. Volume 8, Number 5.

7) "The purpose of this study was to determine whether achievement motivation can be taught by either of two approaches common to the kindergarten. 82 children were placed in representative groups using (1) cognitive-direct teaching of components to enhance motivation, (2) social-social interaction within, self-selected activities, and(3) control-continuation of regular activities. Significant growth in motivational level occurred in both cognitive and social groups as compared with the control group (.05 level). Incorporation of motivational sequences into kindergarten curricula appears advisable."

Koep, Robert G. "The Effects of Social and Cognitive Interaction Strategies on Children's Motivation to Achieve in School". ERIC. November, 1973. Volume 8, Number 11.

X 8) "The rationale for the existence of developmental kindergarten classes is based on individual differences, the general importance of early childhood education, and the advantages of early detection of emotional disturbance and learning disabilities. The Waukegan program focuses on early identification and specification of problems, development of perceptual skills, creation and evaluation of techniques to increase school readiness, promotion of co-operative work between school personnel, specialists and parents, and the development of children's visual, motor, and language skills."

Abbott, Robert E. "Developmental Kindergarten Classes of the Waukegan Community Unit School District # 60". ERIC. December, 1973. Volume 8, Number 12.

9) "The purpose of this study was to investigate the effects of a sequenced, highly-structured direct instruction program in language and reading skills on the intellectual growth, academic achievement and school adjustment of 303 middle class kindergarten children. Results indicated that children in the experimental groups performed better on most intellectual and achievement measures at the end of kindergarten . Reading gains remained at the end of the first grade. There were significant differences at the end of first grade in school adjustment favoring the experimental group. Structured instruction can apparently be used successfully in kindergarten."

Singer, Bernard. "The Effects of Structured Instruction on Kindergarten Pupils". ERIC. June, 1974. Volume 9, Number 6.

10) "This paper presents a kindergarten teacher's attempt to implement a process kindergarten curriculum which emphasizes the three skills of perceiving, creating, and decision-making. The experiences, materials, displays, books, and projects used are fully described. Independence to pursue individual interests is encouraged in the classroom, and special emphasis is placed on teacher-student verbal exchanges and teacher observation of students to ensure that the children's academic and social qualities and needs are recognized and given attention."

Kissinger, Jean. "A Process Curriculum for Five-Year-Olds. Occasional Paper No. 7". ERIC. December, 1974. Volume 9, Number 12.

11) "The effects of a perceptually oriented physical education program (PPE) on perceptual-motor ability and academic ability were studied using kindergarten children. The four groups of kindergarten children varied the number of periods of PPE per week which then met--0, 1, 2, and 3 times per week. There were no significant differences among the kindergarten groups in either perceptual-motor abilities or academic ability."

Davis, Robert G. "The Effect of Perceptually Oriented Physical Education on Perceptual Motor Ability and Academic Ability of Kindergarten and First Grade Children." ERIC. January, 1975. Volume 10, Number 1.

12) "This study was designed to assess the effects of a specifically designed perceptual-motor program on the level of perceptual-motor development, self-concept, and academic ability of kindergarten children. Each group received the same kindergarten program with one exception, the experimental group was exposed to a specifically designed perceptual-motor program 30 minutes daily for five months, while the control group received a free play period for 30 minutes. Results of the study indicated that the data tended to support the specificity of training concept. The variables showing the greatest change were the perceptual-motor tests which measured changes on specific aspects of the training program. There appeared to be some immediate transfer to academic abilities but this was not pronounced enough to suggest that perceptual-motor training was of real benefit in developing academic abilities for normal kindergarten children. In addition, the follow-up test indicated no long term effects on academic performance."

Thomas, Jerry R. and Others. "Effects of Perceptual-Motor Training on Preschool Children: A Multivariate Approach". Research Quarterly. 46:505-513. December, 1975.

What relationships exist between teacher responsibility and school success?

1) "When teachers have a theoretical understanding of why they do the things that seem to "work" or "feel right", they will have more than intuitive wisdom on which to base their effective methods of teaching."

Furth, Hans G. Piaget for Teachers. Prentice-Hall, Inc.: Englewood Cliffs, New Jersey. 1970. p. viii.

2) "Teach children the specific skills when they need them. Help them to succeed and to provide the emotional support they need. Help them to succeed and provide the basis for building a positive self-image, for if a child has a positive self-image, he will learn because he wants to, not because he is supposed to."

Bixby, Annabel A. "Do Teachers Make A Difference?". Childhood Education. Association for Childhood Education International: Washington, D. C. 54:287-90. Ap/My '78. p. 290

(THE NEXT QUOTES ARE OUT OF DATE, BUT I FELT THAT THE CONTENT WAS IMPORTANT ENOUGH AND STILL APPLICABLE ENOUGH TO INCLUDE WITHIN THIS SECTION.)

3) "The wise teacher knows that only practice makes for perfection. She therefore plans her work and teaches each day as well as she can knowing that constant improvement will result." (p. 390).
4) "The major factor in how children succeed in the kindergarten is without doubt the teacher." (p. 4).
5) "The teacher has grave responsibility in helping children to become a part of their social world, so she must have a knowledge and an appreciation of the culture." (p. 4).

Heffernan, Helen, Todd, Vivan E. The Kindergarten Teacher. D. C. Heath and Co.: Boston. 1960.

6) "Because the teacher's attitudes are so easily transmitted to her small pupils, it matters a great deal what her philosophy of life is."

Barnouw, Elsa and Swan, Arthur. Adventuring with Children in Nurser School and Kinder arten. Thomas Y. Crowell Co.: New York. 19 9. p. 3 .

7) "The teacher's task is not to occupy pupil's time but to provide experiences that make the time fruitfully spent."

Davis, David. Patterns of Primary Education. Harper and Row: New York. 1963. p. 82.

8) "...pupil-pupil relationships are at least as crucially important to the learner as the more traditionally emphasized relationships between teacher and pupils."

Estuan, Frank J. and Estuan, Elizabeth W. The Child's World: His Social Perception. G.P. Putnam's Sons: N. Y. 1959. p. 212

## CLASS SIZE

"Where classes are large, children receive very little individual attention. They have little opportunity to engage in creative activity, and are exposed to very little variety in instructional methods. Opportunity in large classes for conversation and for practicing oral language skills is limited. Large classes seem to result in an increase in aggressive acts.

"Classes which are too large result in: conformity, limited diagnosis of pupil needs, lack of individualized instruction, lack of problem-solving experiences, restriction in a variety of teaching methodologies and a desensitizing of human values."

Mindess, David and Mary, Guide to an Effective Kinder arten Program, W. Nyack, NY, Parker u ompany,

"Class size is an important component of classroom life, bearing in the availability of interpersonal contacts with teachers and peers...Social interactions are also important for the child's intellectual growth...contacts with the peer group broaden the young child's viewpoint and help him to move beyond his egocentric perceptions of the world to a more mature grasp of reality.

"Both cognitive and affective areas appear to be mediated by the quantity and quality of the child's social interactions, these in turn, being influenced by the factor of class size."

Shapiro, Sylvia, "Pre-School Ecology: A Study of Three Environmental Variables", Reading Improvement, vol. 12:4 (Winter, 1975), p. 237.

"It is commonly believed that small groups and classes are more invitational to extensive social participation than are large groups and classes. However, findings of a recent study suggest that, for at least groups of four year olds in pre-schools, this view is open to question."

Shapiro, Sylvia, "Pre-School Ecology: A Study of Three Environmental Variables", Reading Improvement, vol. 12:4 (Winter, 1975), p. 238.

## MATURATION LEVELS

"As developmental characteristics are thoughtfully considered, a program should be planned appropriate to the child's 'stage of development' that would 'be satisfying to him in the present' and 'prepare him for the 'years immediately following.'"

"Children need protection against fatique by the provision of a rest period, they require equipment and time for big muscle play, and freedom from pressure that would encourage them to talk"

Weber, Evelyn, The Kinder Encounter with Educational Thought in erica, niversi y, ege Press, 1969, p. 184.

"Ego strength is very important...It is therefore important to help a child gain the inner security which comes of feeling welcomed and wanted--he needs to feel he belongs!"

Weber, Evelyn, The Kindergarten, Its Encounter with Educational Thought in America, Columbia University, Teacher's College Press, 1969, p. 186.

"The five year old is learning rapidly. If a problem is made interesting and pleasant the kindergarten child will learn rapidly...The speed with which learning goes on depends in a large part upon the personality of the teacher.

"The child needs opportunity for practice and needs to feel his goal is within reach."

Foster, Josephine C. Ph.D. and Neith E, Headley, Education in the Kindergarten, New York, American Book Company, 1936, pg. 6-7.

"Emotionally, a child is on the road to maturity. He responds in a more controlled manner."

Foster, Josephine C.,Ph.D. and Neith E. Headley, Education in the Kindergarten, New York, American Book Company, 1936, p. 10.

"Experience is always necessary for intellectual development... But I fear we may fall into the illusion that being submitted to an experience is sufficient...more than this is required. The subject must be active, must transform things, and find the structure of his own actions on the objects."Piaget

Mindess, David and Mary, Guide to an Effective Kindergarten Program, W. Nyack, NY, Parker Publishing Company, 1972, p. 34.

ORGANIZATIONAL PATTERNS

"Among mental characteristics of the five year old...were his eagerness for information, his curosity, and his desire to investigate and examine.

"An integration of more content into the curriculum seemed to be called for both in keeping with the mental abilities of five year olds and in answer to criticisms that kindergarten was barren of intellectual criticism."

Weber, Evelyn, The Kindergarten, It's Encounter with Educational Thought in America, Columbia University, Teacher's College Press, 1069, p. 191..

"With young children, the maintaining of a balance between individual and group activities is most important, for they are still largely individual. They should be encouraged to take part in group activities but not forced into them."

Garrison, Charlotte G. et al., Horace Mann Kindergarten for Five Year Old Children, Columbia University, Teacher's College Press, 1937, p. 5.

"The teaching plan is made up of experiences valuable for children. These experiences are determined by the teacher's knowledge and understanding of the fundamental factors in the child's development together with her awareness of the significant and valuable possibilities in the immediate environment."

Garrison, Charlotte G. et al., Horace Mann Kindergarten for Five Year Old Children, Columbia University, Teacher's College Press, 1937, p. 5.

"...The first screen in selecting experiences is the developmental needs of the group...a needs or emerging curriculum requires teacher-pupil planning in order to identify "felt needs" of the learner."

Weber, Evelyn, The Kindergarten, Its Encounter with Educational Thought in America, Columbia University, Teacher's College Press, 1937,

"Because of emotional immaturity, five year old children need a simple, wholesome environment which will not underly stimulate them or make too heavy demands upon self-control...the curriculum is rich in content but there is definite effort to keep activities simple."

Garrison, Charlotte G. et al., Horace Mann Kindergarten for Five Year Old Children, Columbia University, Teacher's College Press, 1937, p. 8.

## THE ROLE OF THE TEACHER

"...A teacher should be thought of as a human being primarily and a teacher only secondarily or as a human being who is greatly interested in teaching.

"The teacher of young children needs to be alert physically as well as mentally. She needs to have the spirit of the explorer, to be quick to change as her group changes or as research studies and the experience of others suggest change."

Foster, Josephine C. Ph.D., and Neith E. Headley, Education in the Kindergarten, New York, American Book Company, 1936, p. 80.

"She needs to know what methods have proven most effective in teaching young children and she needs to recognize the fact that variety in method is salutary for teacher as well as child."

Foster, Josephine C. Ph.D. and Neith E. Headley, Education in the Kindergarten, New York, American Book Company, 1936, p. 85.

"It is the business of the teacher not only to present problem-solving situations to the child, but also to select carefully, problems which may, with reasonable degree of accuracy, be solved by the child in the light of his present fund of information."

Foster, Josephine C. Ph.D., and Neith E. Headley, Education in the Kindergarten, New York, American Book Company, 1936, p. 89.

"...It is desirable that the teacher know as much as possible about facts of child development and about each individual child with whom she is working...select materials conducive to the child's growth;...supply wise guidance of activities..."

Garrison, Charlotte G. et. al., Horace Mann Kindergarten for Five Year Olds, Columbia University, Teacher's College Press, 1937, p. 6.

"The ever increasing transitoriness of human relations places a greater responsiblity than ever on teachers to provide young children with warm supportive contacts, and to help them develop good social relationships with their peers."

Shapiro, Sylvia, "Pre-School Ecology: A Study of Three Environmental Variables", Reading Improvement, vol. 12:4 (Winter, 1975), p. 237.

"Understanding trainee needs and motivations as reflected by varying conceptualizations of the role of teacher is simplified through typological grouping. Research has postulated three teaching types: (A) Ambitious"(expressed in terms of achievement); (C)"Conscientious"(characterized by obedience to rules and detail); (I)"Indulgent"(emotional feelings of having, participating, and understanding).

# CLASS SIZE

In some instances the number of children enrolled in a single kindergarten unit far exceeds the ideal of from twenty to twenty-five children, but every effort is being made to keep the size of the group near that number. Class size in American kindergartens varied in the late 1940's from twenty to forty-five children in a single half-day session. The median class size was twenty-nine and the most frequent size was thirty to thirty-five. In many cities additional kindergarten units have been added to accomodate the increase in enrollment, and in only a relatively few communities usually those suburban communities that have sprung up almost overnight, is the kindergarten enrollment sometimes quite beyond the bounds of reason. New Jersey is credited with being the first state to enact a law providing that state aid be withheld where honest effort is not made to approach a twenty-four maximum kindergarten enrollment. (Foster and Headley, Education in the Kindergarten, Fourth Edition, D. Van Nostrand Co., N.Y., 1966,p. 29.)

Clearly, education in a democratic society puts primary emphasis on the worth of the individual. But children attend school in groups ,and there's the rub. A group may consist of fifty, which can seem like a herd, an undifferentiated mass, and the teacher will find it difficult to maintain contact and give guidance on an individual basis to the Tommys and Marys who make up the fifty. Gwen W. Mc Conkie and Marie M. Hughes found, in a study of two groups of kindergarten children--one composed of thirty-seven and the other of twenty-six--that the quality of interpersonal relationships was related to the size of the group. In the large group, forty-three percent of the children who asked questions were not answered. In the small group, only thirteen percent of the questions went unanswered. In the large group, one-fourth of the children were not greeted on arrival during the period under observation. In the small group no child was left ungreeted. It is easy to see the educational and human advantages of smaller kindergarten classes and theoretically that is our national goal. (Cohen and Rudolph, Kindergarten and Early Schooling, Prentice Hall, 1977, pp. 27,28.)

Large class is a roadblock to an activity program of first-hand experiencing, of learning by doing. It limits the kinds of experiences that can be opened up. It rules out all those activities that make a muss, these that call for much teacher supervision, those that create any noise.....Good class size for five-year-olds is about 20 children in a group. (James L. Hymes,Jr., Teaching the Child Under Six, Early Childhood Series, Charles E. Merrill Pub. Co., Columbus, Ohio, 1968, pp. 124,125.)

The recommended number of children in a kindergarten classroom is between 20 and 25. With this number of children a promising practice is to have one teacher and one aide. Unfortunately many five-year-olds attend classes which have 30 or more children in a class, with a teacher and no aide. (David Mindess, Guide to an Effective Kindergarten Program, Parker Pub. Co., West Nyack, N.Y., 1972, p. 24.)

## LENGTH AND SCHEDULING OF THE SCHOOL DAY

A short two-and-one-half-hour session, often further shortened by attention to winter clothing and chores, allows the barest minimum for developing a good, unhurried, intellectually varied and stimulating program that is satisfying to four-to-six-year-olds. When that brief time is usurped by an emphasis on training in skills, the loss to the children is even greater. In a short session the teacher is bound to skimp on trips or outdoor play, and to encourage brief encounters with play materials in an effort to include variety of experience. Far from feeling unpressured, the teacher becomes an anxious clock watcher. When short sessions also mean double sessions, the teacher is held responsible for two separate groups of twenty-five to forty children daily, the only teacher in the elementary hierarchy to be so taxed. She cannot possibly get to know all the children well or plan for their needs in any depth. It should be obvious that a teacher with one group of children in a longer session can offer children much more to enhance their learning, a benefit in the end to them, their parents, and the community.

Ideally, therefore, kindergartens should be longer than the present minimum. (Dorothy H. Cohen, Kindergarten and Early Schooling, Prentice Hall, Inc., 1977, pp. 368, 369.)

In the early days of kindergartens, the teacher spent only the mornings with the children, her afternoons being devoted to making contacts with the parents. There are a few schools in which this practice is continued or is being initiated. In one fairly large school system, two teachers are provided for the two groups; each teacher has her own group but assists the other when her group is not in attendance. In the same system the kindergartens are in session part time during the first two weeks of school, while the teachers spend the rest of the time calling on the families, getting background information, and seeing the child in his own environment. The length of the kindergarten day depends on many factors, such as size and preparation of the staff, number of children enrolled, available space both indoors and out, adequacy of equipment and supplies, and provisions for luncheon and rest. (Foster and Headley, Education in the Kindergarten, Fourth Edition, D. Van Nostrand Co., N.Y., 1966, pp. 152, 153.)

The kindergarten devotes approximately 36 percent of its day to physical education, including play on apparatus, outdoor play, games, rhythms, rest, and lunch; 33 percent to general arts, including housekeeping activities, fine and industrial arts, and dramatic art; 16 percent to general assemblies, including plans for work, evaluation of work, behavior, hygiene, and nature; 9 percent to literature and language, including stories told and read, poems read and repeated, conversation, and original stories; and 6 percent to music, including singing, music appreciation, and rhythms.....The program details, as well as the time scheduling, will be influenced by such things as the background of the children, the personality of the teacher, the place of the kindergarten in the organization of the school, and the location of the school itself. (Foster and Headley, Education in the Kindergarten, Fourth Edition, D. Van Nostrand Co., 1966, pp. 154, 155.)

## MATURATION LEVELS OF CHILDREN

Even before we review the facts which we have long accepted as guides to the child's maturity, let us heed an admonition! Educators need to become more informed about neuro-maturation. The development of the child's nervous system is closely related to his ability to perceive ideas and perform tasks. Pediatricians use the term "developmental quotient" rather than "intelligence quotient." The DQ considers all phases of the child's growth pattern such as motor development, adaptive behavior, social-personal relationships and facility in the use of language. ..... At age five the body has attained about 38 percent of its mature development, though different parts of the body are developing at different rates. The brain has developed so rapidly that by five or six it is almost as large as it will ever be. By age five the lymphoid organs have attained about 80 percent of their growth, the nervous system about 88 percent, and the genital organs about 8 percent. All the baby teeth have appeared, and possibly one or two have already fallen out..... Apparently eye maturation, like much other human development, is greatly dependent on the individual growth pattern. We do know that for young children low vision is likely to be the rule rather than the exception during the preschool years and even up to nine years of age.....

More striking than mere growth of individual parts of the body at this age is the gain in control which the child has acquired over his muscles. In the first five years of life, the individual changes from a newborn infant whose random movements are completely uncoordinated to an alert child who, in gross muscular control, is very much the master of his motor self.....One of the interesting facts about the motor development of the kindergarten child is that this physical development is not a reliable indicator of his mental ability.....

Though the physical growth curve indicates a slowing down of physical development at the five-year level, there is no real evidence that the same is true of intellectual development. Although the curve for the normal child usually continues in a gradual ascent, it is not until the five-year level that we begin to get a significant correlation between scores on mental tests given at this age with scores on tests given at a higher age level.

Emotionally also the five-year-old child is on the road to maturity. From the comparatively simple and clear-cut emotional responses of his early years, he has now developed finer shades and gradations of feeling, more subtle responses to a greater variety of stimuli, and his responses are more varied. He responds, also, in a more controlled manner.

The five-year-old is definitely more social then he was the year before. Records show that the percentage of solitary children decreases steadily from year to year from 8 percent at age 3 and 5 percent at age 4 to 2 percent at age 5. Not only is the older child less solitary but he is also gradually coming to enjoy larger groups of companions. (Foster and Headley, Education in the Kindergarten, Fourth Edition, D. Van Nostrand Co., N. Y., 1966, pp. 1-17.)

Several longitudinal studies indicate that underage children who met the readiness criterea and who entered kindergarten under a flexible admission policy did succeed in school. Many earned honors, were active in extracurricular activities, and seemed to be socially well-adjusted. (David Mindess, Guide to an Effective Kindergarten Program, Parker Pub. Co., West Nyack, N.Y., 1972, p. 26.)

First, she is a "stage-setter," an invitation-extender. She organizes the space and the materials in it, in ways that will invite active experimenting, discovery and learning. She also sits the tone, the atmosphere which encourages this learning. She expects it to be lively and enjoyable. She is a reasonable setter of limits. She protects children by not permitting them to do things that might endanger themselves or others. She discourages misuse of materials. She is clear without needing to be punitive.....She helps children to accept the limits that safeguard, and to begin to incorporate their own controls.

She helps children face reality. She knows the intensity of feelings that young children have, and the pain they suffer when frustrated. She accepts the feeling, but also tries to help the child accept the reality of not always being able to have or do or be what he wants.....She is alert to cues that children give her about themselves and their needs, and she is a consistent accepter and respecter of each child's uniqueness. She is not interested in identical responses or products. She respects differences and strives to help each child discover his own particular personality. (Evelyn Beyer, Teaching Young Children, Western Pub. Co., 1968,p.229.)

The stereotype suggests that in kindergarten the teacher is a follower-responder who initiates little but reacts to the child's initiative. The primary teacher, on the other hand, is expected to initiate the major teaching-learning activities and to communicate to the students what is expected of them. Both the kindergarten teacher and the primary teacher need to guide children into certain activities, to initiate learning behavior compatible with the goals of the primary program, and to keep aware of her children's capacity to move forward. Both teachers provide a link in the long chain of persons who will be involved in helping to socialize the child into the forms of behavior considered acceptable by the larger society in which he will be expected to function. (Caldwell, Bridging the Chasm Between Kinder arten and Primar School, Instructor, Vol. 83, Dec. 1973, p. 2.

By observing each child beforehand, I have clues as to the best approach in establishing friendships with each individual, have a general idea of what skills and concepts need developing and can better deal with learning disabilities or health problems. Knowing family interests and occupations in the beginning of the year also helps me plan whole class activities and field trips involving parental participation. (James A. Harris, Mr. Davis Pays a Visit, Teacher, Vol. 94, Sept. 1976, p. 74.)

Kindergarten teachers who focus on conceptual development will recognize their responsibility to provide appropriate and challenging experiences to extend and develop children's understandings. They will be actively introducing and initiating new experiences for children as well as supporting and extending activities which emerge from the routine activities of the kindergarten day.....The teacher who waits for things to happen is at the mercy of fate. If the teacher is willing to plan, she can insure that certain events will occur. She is also prepared to guide the children's observations and perceptions and to help them to organize the information they collect. (Robison and Spodek, New Directions in the Kindergarten, Early Childhood Series, Teachers College Press, Columbia University, 1965, pp. 116, 117.)

The beliefs that intellectual growth needs to be sacrificed so that affective and social nurturance can be maximized or that the emotions can be disregarded in the pursuit of academic skill present a false set of alternatives. Human growth moves along all of a piece; self-actualization includes all aspects of functioning. Intellectual and emotional abilities are inseparably interwoven.....The fundamental kindergarten problem, as in all curriculum design, is one of balance--a synthesis of all the pieces into a coherent pattern of relationship. Within the school setting the child needs a chance to be known and understood as a person as well as the opportunity to learn and to develop a love of learning. Establishing kinship with other children in the context of learning and responsible functioning needs to be balanced with the fostering of uniqueness. Affective, cognitive, and psychomotor development all need consideration in depth and proportion. Symbolic experiences need the illumination of direct experience. Creative expression, so important in the growth of the person, must be nurtured by an evocative environment. The need for balance argues against piecemeal curriculum.reform. (Evelyn Weber, The Kindergarten, Its Encounter with Educational Thought in America, Early Childhood Education Series, Teachers College, Columbia University,1969,pp. 240,241.)

Motor activities form an important part of the curriculum for young children. As the teacher observes the play, she may extend the range of experience by introducing a game of throwing beanbags at a target or of balancing on a walking board. She may rearrange the boards and boxes in new patterns to encourage a range of activities to develop coordination of large and small muscles.

The child learns about the world around him through his senses, seeing, hearing, feeling, tasting, and smelling, and through his kinesthetic sense. The greater the input of sensory impressions, the more material he has out of which to build concepts of what the world is like. He improves his tools for understanding the world as he improves the keenness of his sensory perception. The teacher provides for a wide variety of sensory experiences and encourages their use.

Identifying, associating, organizing, classifying, and perceiving relationships are important aspects of learning in the nursery school years. Children do much of this in their play, but some of this is done through games and experiences devised to focus on developing these skills. They are learning to perceive basic relationships involving objects and space and time relationships, and cause and effect relationships.

(Katherine Read, The Nursery School: Human Relationships and Learning, W.B.Saunders Co.,Philadelphia, 1976, pp. 226,227,233.)

The kindergarten and primary grades are just as important as the later grades in conceptual learning, especially because good beginnings of basic concepts are to be established upon which subsequent learnings can be built. Instead of coping with a curriculum unrelated to later school learning, kindergarten children would be beginning to fashion the basic concepts they will be expanding and developing all through school. (Robison and Spodek, New Directions in the Kindergarten, Early Childhood Series, Teachers College Press, Columbia University, 1965, p. 13.)

You can adapt some of the techniques for integrating the kindergarten and primary grade curriculum within the building in which you work.....This represents curriculum integration on a vertical basis, where the curriculum is built step by step. (David Mindess, Guide to an Effective Kindergarten Program, Parker Pub. Co., West Nyack, N.Y., 1972, p. 153.)

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APPENDIX F

# KINDERGARTEN STUDY


DEPARTMENT OF EDUCATION
COMMONWEALTH OF VIRGINIA
RICHMOND, VA. 23216

JANUARY, 1979

# FOREWARD

This kindergarten survey represents a partial response to House Joint Resolution No. 146 passed by the 1978 session of the Virginia General Assembly. It has been developed through the cooperative efforts of local school personnel, Virginia Congress of Parents and Teachers, Department of Education, and the Joint Subcommittee of the Education Committee of the House of Delegates and the Senate Education and Health Committee on Certain Aspects of Kindergarden Programs (HJR 146).

Appreciation is extended to all who participated. Teachers from three school divisions and several early childhood specialists previewed the survey and assisted in its final development. The Virginia Congress of Parents and Teachers supplied names and addresses of local P.T.A. presidents. Principals, kindergarten contact persons, kindergarten teachers and P.T.A. presidents from all Virginia school divisions gave valuable assistance by their responses. Personnel from various divisions and services of the Department of Education cooperated to develop and distribute the survey instruments, and analyze and interpret the data, review the tentative report and prepare the final report.

Special appreciation is extended to the legislative subcommittee, chaired by The Honorable Dorothy McDiarmid, for the confidence they placed in the Department to provide needed information and for suggestions given throughout the study. The data has been presented to the subcommittee for their consideration. It will be a fund of knowledge that will assist the Department of Education to maintain quality kindergarten programs in the Commonwealth.

Grey W. Ritchie
Kindergarten Supervisor
Division of Sciences and
Elementary Administration
Survey Coordinator

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JOINT LEGISLATIVE SUBCOMMITTEE OF THE GENERAL ASSEMBLY

KINDERGARTEN SURVEY SUMMARY

JANUARY, 1979

The 1978 session of the Virginia General Assembly passed Joint House Resolution No. 146 which required that a study be made of Virginia kindergarten programs. It stated:

> RESOLVED by the House of Delegates, the Senate concurring, That the House Education Committee and the Senate Education and Health Committee are requested to identify kindergarten program objectives and instructional methods which are consistent with the needs and learning styles of young children, to determine the factors which prevent public school kindergartens from achieving the identified program objectives, including class sizes, lengths and scheduling of school days, readiness and maturation levels of children, organizational patterns and teacher responsibilities, and to make such recommendations regarding public school kindergarten programs as they deem appropriate to the nineteen hundred seventy-nine session of the General Assembly.

A committee composed of six members of the General Assembly and five citizen members was appointed to implement the study. The Department of Education presented to the committee a study plan which contained two major parts; a survey of kindergartens in Virginia and a search of relevent literature. The plan was approved by the committee who charged the Department of Education with responsibility for implementing the kindergarten survey.

The purpose of the survey was to (1) identify kindergarten objectives which are accepted by school personnel and parents, (2) to determine factors which prevent public school kindergartens from achieving the objectives, and (3) to gather additional information needed to implement quality kindergarten programs throughout the Commonwealth.

The Department of Education formulated questionnaires which were revised and approved by the committees. The questionnaires were mailed with a cover letter from the Honorable Dorothy McDiarmid, chairperson of the committee, a copy of Joint House Resolution No. 146, and a postpaid return envelope to the following:

2342 Kindergarten Teachers
975 Principals of schools containing kindergartens
134 Kindergarten Contact Persons
780 PTA Presidents of schools which house kindergarten

Returns were received and processed by the Department of Education. Some returns could not be processed because of the omission of necessary information (i.e. the division name was omitted). Every school division in Virginia contributed to the survey. Usable responses were received from the following:

| | |
|---|---|
| 76% | Kindergarten Contact Persons |
| 71.5% | Principals |
| 71% | Kindergarten Teachers |
| 36.5% | PTA Presidents |

Following is a summary of the survey results. It will be submitted to the legislative subcommittee for their consideration and will be used by the Department of Education when needed for program decisions.

## KINDERGARTEN OBJECTIVES

Identical objective questionnaires were sent to kindergarten teachers, principals, kindergarten contact persons and Parent-Teacher Association presidents. The objectives were taken from A Guide for Kindergarten Education, 1975. For every objective stated, two responses were required: (1) Is this an objective in your classroom or school? and (2) Circle according to the degree of importance you believe the objective should have in kindergarten.

The results of the survey clearly indicate that all objectives are accepted as very important or important by a significant percentage of all four responding groups.

Teachers agreed with the stated kindergarten objectives to a significant degree (96.7 percent). Eighty to ninety-two percent said that all stated objectives were objectives of their programs. Principals rated all listed objectives as very important or important by at least ninety percent. They reported that all listed objectives are contained in their kindergarten programs. Contact persons accepted the objectives to a very high degree (95 percent). Eighty-three percent to ninety-two percent said that all stated objectives were objectives of their programs. Over ninety percent of P.T.A. presidents rated all stated objectives very important or important except for objectives #12 (82.4 percent) and #23 (88.7 percent). Many indicated that they were unsure whether the objectives listed in the questionnaire were to be found in their school programs.

## FACTORS WHICH PREVENT ACHIEVEMENT OF OBJECTIVES

### Class size

Teachers reported that a majority of the classes (59 percent) have 20 - 25 children in both single and double sections. Classes having more than 30 children were reported in both single and double sections. (Two sections: 4 percent - a.m. 3.5 percent - p.m., One section: 3 percent.) (Experience with accreditation reports indicates that the reported figures may be inaccurate because of faulty interpretation of the question.) A

large majority of the teachers having fewer than 20 children stated that their class size assisted their programs. Teachers with more than 20 children indicated that class size hindered their program.

From a list of 18 choices, principals reported that smaller pupil-teacher ratio was the third most urgent need of their kindergarten programs. The two greatest needs were (1) communication between kindergarten and first grade and (2) understanding of child development and learning styles of children. From a list identical to the principals, kindergarten contact persons reported that smaller pupil-teacher ratio was the seventh most urgent need.

One third of teachers reporting have no paid aides. Having an aide as much as half time was reported to assist the program. Having an aide less than one half time was reported as having no effect or as a hinderance. Sixty-six percent of classrooms have no volunteer help. Teachers who have the most volunteer help indicated greatest agreement (97 percent) on its value.

From the list of 18 choices, principals identified aides in the classroom as their eighth most urgent need. Contact persons identified aides in the classroom as their thirteenth most urgent need.

Lengths and scheduling of school day

68.5 percent of teachers have one section of children daily. Teachers with one section reported greater satisfaction with their arrangement than teachers with two section (59 percent to 22.5 percent).

A large majority of teachers (89 percent) reported that they have freedom to schedule their programs to fit the needs of children. Ninety-three percent of those teachers reported that freedom to schedule assists their programs. Further, eighty-eight percent of the teachers who do not have freedom to schedule, reported that it hinders their program.

Readiness and maturation levels of children

Lack of social/emotional maturity was given as second in importance as a reason for kindergarten retention by teachers. They ranked failure to attain kindergarten minimum skills as the most important reason for retention. There was no indication how minimum skills for kindergarten were determined. Principals and contact persons reported that understanding of child development and learning styles of children was one of the three greatest needs of the kindergarten programs.

Organizational patterns

A large majority of kindergarten children (80 percent) are in self contained classrooms. Teachers reported satisfaction with the classroom organization they presently have.

## ADDITIONAL INFORMATION

### Entrance age date

Seventy percent of the teachers chose September 30 as the most appropriate cut-off date for entrance to kindergarten. Many wrote explanations with their answers which will be compiled at a later date. Eighty percent of the teachers agree that school offers a better learning environment than many children would have otherwise and seventy-three percent agree that children 4 years and 8 months can benefit from planned experiences with other children. Sixty-seven percent agree that kindergarten children are often pressured to perform beyond their developmental levels.

September 30 was chosen as the most appropriate date for kindergarten entrance by principals (64 percent), contact persons (64 percent), and P.T.A. presidents (53 percent). December 31 was their second most frequently chosen date.

### School personnel experience

Over one-half of kindergarten teachers have taught between two and five years. Two and nine-tenths percent taught kindergarten for the first time in 1978-79. Over one-half (53.2 percent) of the kindergarten teachers have experience teaching at another grade level. Eighty percent of that number have taught primary grades.

A large majority of the principals are experienced administrators. They reported that they receive central office assistance with kindergarten programs.

A majority of contact persons have taught in primary and elementary schools and almost one-fourth have taught kindergarten. Many contact persons have taught at more than one level.

### Strengths of kindergarten program

According to principals and contact persons the two greatest strengths of their kindergarten programs are pupil-teacher interaction and diversified child-centered experiences. A majority of teachers reported that their classroom space is adequate (64.5 percent), their teaching materials are appropriate in quality (87 percent), and adequate in quantity (66 percent).

### Parent involvement

Two thirds of the P.T.A. presidents responding say they have not been involved in planning and implementing the kindergarten curriculum. No specific pattern can be drawn concerning, (1) the way parents are involved, (2) degree of interest in greater involvement, and (3) reasons for the lack of involvement.

A majority of teachers (66 percent) reported that they have no volunteer help. Teachers who have available volunteer help on a regular basis reported that this assisted the achievement of their objectives. Conversely, forty-six percent of teachers who had no volunteer help reported that this had no effect on their programs.

Improved communication with parents was reported among the six most urgent needs by both kindergarten contact persons and principals.

Philosophy of early childhood education

A large majority of teachers reported that their philosophy of early childhood education is consistent with principals (86 percent), parents (84 percent), other kindergarten teachers (82 percent), central office staff (74 percent), and other primary teachers (72 percent). Teachers reported that a consistent philosophy assisted their programs.

Principals and contact persons reported that a clarified philosophy of early childhood education was their fifth most urgent need. Both groups reported that communication between kindergarten and the first grade was their most urgent need.

Kindergarten content

Teachers reported that all listed areas of instruction are included in their kindergarten programs (97 percent - 99.6 percent). 91.5 percent of teachers reported that they have freedom in the use of teaching materials. This freedom assists their programs. In response to the question concerning major influences that determine what is taught in kindergarten, both principals and contact persons listed locally developed curriculum guides, first and program objectives identified in A guide for Kindergarten Education, second. The most often written in responses to this question were (1) needs of individual children and (2) teacher training and preferences. Two thirds of P.T.A. presidents reported they have not been involved in planning and implementing the kindergarten curriculum.

EXPLANATION OF SURVEY DATA

Data from the surveys are attached. The number and percentage of all respondents choosing each of the available options are given beside each question. The percentages have been rounded to the nearest whole percent except when the number was five tenths. The number responding to each option is written within parenthesis. For each question requiring a rank order, the mean rank for each statement is reported. In instances where two or more groups were asked identical questions, responses have been recorded on the appropriate questionnaire and under the section titled "Common Questions."

JOINT LEGISLATIVE SUBCOMMITTEE OF THE GENERAL ASSEMBLY

QUESTIONNAIRE FOR KINDERGARTEN TEACHERS

STUDY OF KINDERGARTEN

School Division School _____

I. Your Experience

____ Number of years taught kindergarten
____ Number of years taught another grade

Years taught Kindergarten

| | | |
|---|---|---|
| 0 - 1 | 14.5% | (242) |
| 2 - 5 | 52% | (868) |
| 6 - 9 | 22.5% | (374) |
| 10 - + | 11% | (180) |
| No e | 0 | |

Years taught another grade

| | | |
|---|---|---|
| 0 - 1 | 60% | (996) |
| 2 - 5 | 25% | (414) |
| 6 - 9 | 7% | (121) |
| 10 - + | 8% | (133) |
| No e | 0 | |

II. Circle grades you have taught

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | H (High School) |
|---|---|---|---|---|---|---|---|
| 35% | 25% | 20% | 12% | 10% | 7% | 5% | 5% |
| (583) | (415) | (328) | (200) | (163) | (123) | (87) | (84) |

No response - 0

III. Circle the number of kindergarten teachers in your school.

1 2 3 4 5 6 or more

PLEASE RESPOND ACCORDING TO YOUR PRESENT CLASS.

Number of kindergarten teachers in school

| | | |
|---|---|---|
| No response | .5% | (9) |
| 1 | 14.5% | (242) |
| 2 | 29% | (476) |
| 3 | 21.5% | (357) |
| 4 | 17% | (276) |
| 5 | 9% | (147) |
| 6 - + | 9% | (157) |

IV. What is your organizational pattern?

80% (1332) (1) ___Self contained

15.5% ( 258) (2) ___Team teaching

.5% ( 8) (3) ___Departmentalized

3.5% ( 58) (4) ___Other (Please specify)

.5% ( 8) No response

| | No Response | No Effect | Assists | Hinders | Total Number |
|---|---|---|---|---|---|
| Self Contained | 5% (70) | 23% (301) | 69% (918) | 3% (43) | 1332 |
| Team Teaching | 3.5% (9) | 6% (15) | 84.5% (218) | 6% (16) | 258 |
| Departmentalized | 12.5% (1) | 12.5% (1) | 62.5% (5) | 12.5% (1) | 8 |
| Other | 7% (4) | 7% (4) | 53% (31) | 33% (19) | 58 |
| Total | 84 | 32 | 1172 | 79 | 1656 |

V. How many sections do you teach daily?

68.5% (1140) (1) ___ One section

29% (489) (2) ___ Two sections

2% (34) No response

If one section, answer question VI.
If two sections, answer question VII.

| | No Response | No Effect | Assists | Hinders | Total Number |
|---|---|---|---|---|---|
| One Section | 11% (129) | 25% (284) | 59% (669) | 5% (58) | 1140 |
| Two Sections | 14% (69) | 30.5% (149) | 22.5% (110) | 33% (161) | 489 |
| Total Number | 198 | 433 | 779 | 219 | 1629 |

VI. How many children do you have enrolled?

25% (281) (1) ___ Under 20

59% (669) (2) ___ 20 - 25

13% (148) (3) ___ 26 - 30

3% ( 37) (4) ___ Over 30

0.5% ( 6) No response

| Number Children / Effect | No Response | No Effect | Assists | Hinders | Total Number |
|---|---|---|---|---|---|
| Under 20 | 5% (15) | 7% (20) | 85% (239) | 2.5% (7) | 281 |
| 20 - 25 | 9% (61) | 15% (101) | 19% (127) | 57% (380) | 669 |
| 26 - 30 | 5% (8) | 3% (4) | 1% (2) | 90.5% (134) | 148 |
| Over 30 | 5% (2) | 8% (3) | 13.5% (5) | 73% (27) | 37 |
| Total Number | 86 | 128 | 373 | 548 | 1135 |

VII. How many children do you have enrolled?

| A.M. | P.M. | |
|---|---|---|
| (1) 40% (196) | (1) 48% (234) | Under 20 |
| (2) 42.5% (208) | (2) 38% (186) | 20 - 25 |
| (3) 12.5% ( 61) | (3) 10% ( 49) | 26 - 30 |
| (4) 4% (20) | (4) 3.5% (17) | Over 30 |
| 0.8% (4) | 0.6% (3) | No response |

VII. A.M.

| Children / Effect | No Response | No Effect | Assists | Hinders | Total Number |
|---|---|---|---|---|---|
| Under 20 | 3% (5) | 15% (30) | 69% (135) | 13% (26) | 196 |
| 20 - 25 | 3% (6) | 26% (55) | 24% (49) | 47% (98) | 208 |
| 26 - 30 | 8% (5) | 5% (3) | 3% (2) | 84% (51) | 61 |
| Over 30 | | 15% (3) | 5% (1) | 80% (16) | 20 |
| Total Number | 16 | 91 | 187 | 191 | 485 |

VII. P.M.

| Number Children \ Effect | No Response | No Effect | Assists | Hinders | Total Number |
|---|---|---|---|---|---|
| Under 20 | 6% (13) | 15% (36) | 70% (164) | 9% (21) | 234 |
| 20 - 25 | 7.5% (14) | 21% (39) | 23% (42) | 49% (91) | 186 |
| 26 - 30 | 4% (2) | 2% (1) | 6% (3) | 88% (43) | 49 |
| Over 30 | -- | 6% (1) | 6% (1) | 88% (15) | 17 |
| Total Number | 29 | 77 | 210 | 170 | 486 |

**VIII. Do you have a paid aide in your classroom?**

**39% (646) (1) ___ Full Time**

**11% (176) (2) ___ One-half time or more**

**17% (280) (3) ___ Less than one-half time**

**33% (554) (4) ___ No**

**0.5% ( 8) No response**

| Number Aides \ Effect | No Response | No Effect | Assists | Hinders | Total Number |
|---|---|---|---|---|---|
| Full Time | 1% (9) | .9% (6) | 97% (627) | .6% (4) | 646 |
| ½ time or more | 4.5% (8) | 3% (5) | 88% (155) | 4.5% (8) | 176 |
| Less than ½ time | 3% (9) | 4% (10) | 52% (146) | 41% (115) | 280 |
| No | 8% (44) | 18% (100) | 2% (12) | 72% (398) | 554 |
| Total Number | 70 | 121 | 940 | 525 | 1656 |

IX. Do you have help of specialists?

| No response | Yes | No | |
|---|---|---|---|
| 6% (98) | 68% (1129) | 26% (437) | Music |
| 20% (334) | 32.5% (541) | 47% (789) | Art |
| 12% (201) | 50% (828) | 38% (635) | ___ Physical Education |
| 5% ( 78) | 87% (1444) | 8.5% (142) | ___ Speech |
| 70% (1165) | 30% ( 497) | .1% ( 1) | Other |

| Subject Area Specialist \ Effect | No Response | No Effect | Assists | Hinders | Total Number |
|---|---|---|---|---|---|
| Music | | | | | |
| Yes | 3% (31) | 5% (61) | 91% (1025 | 1% (12) | 1129 |
| No | 11% (49) | 25% (109) | 3% (15) | 60% (264) | 437 |
| Total | 80 | 170 | 1040 | 276 | 1566 |
| Art | | | | | |
| Yes | 3% (17) | 10% (52) | 86% (463) | 2% (9) | 541 |
| No | 11% (84) | 39% (311) | 1% (10) | 49% (384) | 789 |
| Total | 101 | 363 | 473 | 393 | 1330 |
| Physical Education | | | | | |
| Yes | 3% (27) | 3% (23) | 93% (771) | .8% (7) | 828 |
| No | 10% (66) | 18% (117) | 2% (12) | 69% (440) | 635 |
| Total | 93 | 140 | 783 | 447 | 1463 |
| Speech | | | | | |
| Yes | 11% (157) | 5% (71) | 83% (1200 | 1% (16) | 1444 |
| No | 18% (25) | 13% (19) | 19% (27) | 50% (71) | 142 |
| Total | 182 | 90 | 1227 | 87 | 1586 |
| Other* | | | | | |
| Yes | 5% (27) | 4% (21) | 88% (438) | 2% (11) | 497 |
| No | 100% (1) | -- | -- | -- | 1 |
| Total | 28 | 21 | 438 | 11 | 498 |

*Library, most often stated.

X. How many hours per week do you have volunteer help on a regular basis?

66% (1099) (1) ___ No volunteer help

9% ( 145) (2) ___ 1 hour

7% ( 121) (3) ___ 2 hours

5.5% ( 91) (4) ___ 3 hours

10.5% ( 174) (5) ___ 4 hours or more

2% ( 34) No response

| Number Hours / Effect | No Response | No Effect | Assists | Hinders | Total Number |
|---|---|---|---|---|---|
| No help | 18% (197) | 46% (503) | 2% (18) | 35% (381) | 1099 |
| 1 hour | 7% (10) | 3% (4) | 87% (126) | 3% (5) | 145 |
| 2 hours | 4% (5) | 2.5% (3) | 93% (113) | 0 | 121 |
| 3 hours | 7% (6) | 1% (1) | 91% (83) | 1% (1) | 91 |
| 4 hours or more | 3% (6) | -- | 97% (168) | -- | 174 |
| Total Number | 224 | 511 | 508 | 387 | 1630 |

XI. How much scheduled planning time do you have <u>a week</u> during the time children are in school?

42% (700) (1) None

9% (154) (2) 30 minutes

17% (285) (3) ___ 1 hour

16% (271) (4) 2 hours

13% (223) (5) 3 hours or more

2% ( 31) No response

| Planning Time / Effect | No Response | No Effect | Assists | Hinders | Total Number |
|---|---|---|---|---|---|
| None | 10% (73) | 8% (59) | .7% (5) | 80% (563) | 700 |
| 30 minutes | 8% (13) | 16% (24) | 36% (56) | 40% (61) | 154 |
| 1 hour | 8% (24) | 6% (18) | 49% (140) | 36% (103) | 285 |
| 2 hours | 6% (17) | 3% (9) | 81% (220) | 9% (25) | 271 |
| 3 hours or more | 6% (13) | 1% (3) | 91.5% (204) | 1% (3) | 223 |
| Total | 140 | 113 | 625 | 755 | 1633 |

XII. Do you have one or more diagnosed special education student/s in your room?

17% (279) Full Time ___Yes __No 76% (1263) No response 7% (121)

5% ( 82) Part Time ___Yes __No 58% ( 964) No response 37% (619)

| Amount of Time \ Effect | No Response | No Effect | Assists | Hinders | Total Number |
|---|---|---|---|---|---|
| Full time Student | | | | | |
| Yes | 8% (22) | 29% (80) | 5% (13) | 59% (164) | 279 |
| No | 37.5% (474) | 39% (489) | 21% (268) | 2.5% (32) | 1263 |
| Total Number | 496 | 569 | 281 | 196 | 1542 |
| Part time Student | | | | | |
| Yes | 7% (6) | 33% (27) | 7% (6) | 52% (43) | 82 |
| No | 35% (334) | 42% (401) | 22% (211) | 2% (18) | 964 |
| Total Number | 340 | 428 | 217 | 61 | 1046 |

XIII. Approximately what percentage of your children attended nursery school prior to enrolling in kindergarten? (Check one only)

11% (182) (1) ___ None 9% (152) (4) ___ 51% - 75%

53.5% (890) (2) 25% or fewer 3.5% ( 59) (5) ___ More than 75%

21% (343) (3) ___ 26% - 50% 2% ( 37) No response

| Percent Children \ Effect | No Response | No Effect | Assists | Hinders | Total Number |
|---|---|---|---|---|---|
| None | 22% (40) | 48% (87) | .5% (1) | 30% (54) | 182 |
| 25% or fewer | 11% (97) | 26% (230) | 48% (424) | 16% (139) | 890 |
| 26% - 50% | 7% (23) | 10.5% (36) | 79% (270) | 4% (14) | 343 |
| 51% - 75% | 3% (5) | 10% (15) | 85% (130) | 1% (2) | 152 |
| More than 75% | 5% (3) | 5% (3) | 88% (52) | 2% (1) | 59 |
| Total Number | 168 | 371 | 877 | 210 | 1626 |

XIV. Do you have freedom in the use of teaching materials?

91.5% (1523) ___ Yes 7% (119) No 1% (22) ___ No response

| Freedom With Materials / Effect | No Response | No Effect | Assists | Hinders | Total Number |
|---|---|---|---|---|---|
| Yes | 3% (48) | 2% (33) | 94% (1436) | .4% (6) | 1523 |
| No | 3% (4) | 7% (8) | 3% (4) | 87% (103) | 119 |
| Total | 52 | 41 | 1440 | 109 | 1642 |

XV. Do you have freedom to schedule your program to fit the needs of your children?

89% (1483) ___ Yes 9% (155) No 2% (26) ___No response

| Freedom to Schedule / Effect | No Response | No Effect | Assists | Hinders | Total Number |
|---|---|---|---|---|---|
| Yes | 4.5% (67) | 2% (28) | 93% (1385) | .2% (3) | 1483 |
| No | 6.5% (10) | 3% (5) | 2% (3) | 88% (137) | 155 |
| Total | 77 | 33 | 1388 | 140 | 1638 |

XVI. Is your philosophy of Early Childhood Education consistent with:

12% (207) No response 82% (1367) __Yes 5% (90) No Other kindergarten teachers in your school

10% (163) No response 72% (1203) __Yes 18% (298)__No Other primary teachers

8% (129) No response 86% (1434) __Yes 6% (101)__No Your principal

11.5% (191) No response 74% (1231) __Yes 14.5% (242)__No Central office staff

11% (184) No response 84% (1398) __Yes 5% ( 82)__No Parents

| Philosophy Consistent With / Effect | No Response | No Effect | Assists | Hinders | Total Number |
|---|---|---|---|---|---|
| Kindergarten Teachers | | | | | |
| Yes | 7% (92) | 6% (85) | 87% (1187) | .2 (3) | 1367 |
| No | 7% (6) | 39% (35) | 2% (2) | 52% (47) | 90 |
| Total Number | 98 | 120 | 1189 | 50 | 1457 |

XVI.

| | | | | | |
|---|---|---|---|---|---|
| Primary Teachers | | | | | |
| Yes | 7% (80) | 10% (121) | 83% (1001) | .1% (1) | 1203 |
| No | 3% (10) | 20% (59) | .3% (1) | 76.5% (228) | 298 |
| Total Number | 90 | 180 | 1002 | 229 | 1501 |
| Principals | | | | | |
| Yes | 7% (97) | 5% (74) | 88% (1261) | .1% (2) | 1434 |
| No | 2% (2) | 14% (14) | 1% (1) | 83% (84) | 101 |
| Total Number | 99 | 88 | 1262 | 86 | 1535 |
| Central Office | | | | | |
| Yes | 6% (75) | 7% (90) | 86% (1063) | .2% (3) | 1231 |
| No | 7% (18) | 12% (30) | .4% (1) | 80% (193) | 242 |
| Total Number | 93 | 120 | 1064 | 196 | 1473 |
| Parents | | | | | |
| Yes | 7% (94) | 6% (84) | 87% (1218) | .1% (2) | 1398 |
| No | 6% (5) | 12% (10) | 5% (4) | 77% (63) | 82 |
| Total | 99 | 94 | 1222 | 65 | 1480 |

XVII. Your playground is:
(Check all that apply)

| | | | | |
|---|---|---|---|---|
| 4% (65) No response | 72% (1202) __Yes | 4% (397) __No | Available to you throughout the day |
| 7% (117) No response | 66% (1101) __Yes | 7% (446) __No | Designed for use by primary children |
| 10% (163) No response | 46% ( 760) __Yes | 4.5% (741) __No | Contains needed equipment |

XVIII. Your classroom facilit :
(Check all that apply)

| | | | | |
|---|---|---|---|---|
| .8% (13) No response | 82.5% (1372) Ye | 17% (279) __No | Contains toilet/s |
| 2% (33) No response | 52% ( 859) | 46% (772) __No | Has direct exit to outside |
| 3% (47) No response | 74% (1231) Ye | 23% (386) __No | Has storage space |

XIX. Your classroom space:

| | | | |
|---|---|---|---|
| 64.5% | (1073) | (1) | Adequate |
| 35% | ( 577) | (2) | Too small |
| .2% | ( 3) | (3) | Too large |
| .7% | ( 11) | | No response |

XX. Your teaching materials are:

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2% | ( 39) | No response | 87% | (1451) | Yes | 10.5% | (174) | No | Appropriate in quality |
| 4.5% | ( 75) | No response | 66% | (1101) | Yes | 29% | (488) | No | Adequate in quantity |

XXI. Check your major ways of communicating with parents about their children's progress. (Check all that apply)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 84% | (1391) | (1) | Report Cards | 97% | (1607) | (6) | Parent Conferences |
| 18.5% | ( 308) | (2) | Home Visits | 52% | ( 868) | (7) | Newsletters |
| 40.5% | ( 674) | (3) | Checklists | 10% | ( 169) | (8) | Other (Please specify) |
| 84% | (1404) | (4) | Telephone conversation | 0 | | | No response |
| 80% | (1338) | (5) | Personal Letters | | | | |

XXII. Are the following areas of instruction included in your kindergarten program?

| No response | | Yes | | No | | |
|---|---|---|---|---|---|---|
| 1% | (22) | 97% | (1609) | 2% | (33) | Health |
| .6% | (10) | 99% | (1641) | .8% | (13) | Physical Education |
| .5% | ( 8) | 99% | (1653) | .2% | ( 3) | Music |
| .4% | ( 7) | 99% | (1654) | .2% | ( 3) | Art |
| 1% | (23) | 97% | (1614) | 2% | (27) | Science |
| .5% | ( 9) | 99% | (1652) | .2% | ( 3) | Mathematics |
| .4% | ( 7) | 99.6% | (1657) | 0 | (0) | Language Arts |
| 1% | (21) | 97% | (1621) | 1% | (22) | Social Studies |

XXIII. Which of the following dates do you deem the most appropriate cut-off date for entrance in kindergarten?

FIVE BY:

| | | | |
|---|---|---|---|
| (1) | 70% | (1164) | September 30 |
| (2) | 16% | ( 260) | October 31 |
| (3) | 3% | ( 44) | November 30 |
| (4) | 11% | ( 176) | December 31 |
| | 1% | ( 20) | No response |

XXIV. Check below all of the statements with which you agree:

56% (933) (1) ___ Existing kindergarten and first grade programs are inappropriate for children who entered school less than 5 years old.

59% (975) (2) ___ Programs in kindergarten and first grade can be made flexible enough to meet needs of all eligible children.

73% (1212) (3) ___ Children 4 years 8 months to 5 years old can benefit from planned experiences with other children.

67% (1108) (4) ___ Kindergarten children are often pressured to perform beyond their developmental levels.

42% (692) (5) ___ The attention span of most children 4 years 8 months to 5 years old is too short for school experiences.

80% (1324) (6) ___ School offers a better learning environment than many children would have otherwise.

XXV. How many children did you recommend for retention or assignment to a transitional class last year?

| Number of children | | |
|---|---|---|
| 0 | 31% | (512) |
| 1 | 18% | (300) |
| 2 | 17% | (290) |
| 3 | 11% | (189) |
| 4 | 8% | (130) |
| 5 or more | 15% | (243) |

XXVI. How many children in item 25 had birthdays between October 1 and December 31.

| 0 | 1 | 2 | 3 | 4 | 5 or more |
|---|---|---|---|---|---|
| 19% (315) | | | | | 11% (179) |

XXVII. How many children in item 25 were recommended for retention or assignment to a transitional class for the following reasons?

They lacked social/emotional maturity.

| 0 | 1 | 2 | 3 | 4 | 5 or more |
|---|---|---|---|---|---|
| 20% (340) | 16% (263) | 10.5% (175) | | | 9% (147) |

They lacked physical maturity.

| 0 | 1 | 2 | 3 | 4 | 5 or more |
|---|---|---|---|---|---|
| 64% (1061) | 16.5% (275) | 10% (159) | 5% (81) | | 3% (50) |

They failed to attain kindergarten minimum skills.

| 0 | 1 | 2 | 3 | 4 | 5 or more |
|---|---|---|---|---|---|
| 36% (592) | 19.5% (324) | 17% (289) | 11% (176) | | 11% (180) |

The first grade program was unsuited to their needs.

| 0 | 1 | 2 | 3 | 4 | 5 or more |
|---|---|---|---|---|---|
| 51% (843) | 14% (232) | 12% (199) | 8% (136) | 5% (89) | 10% (165) |

XXVIII. Is retention in kindergarten or assignment to a transitional class an option in your school?

75% (1252) ___Yes 20% (328) ___No 5% (84) No response

XXIX. How many of the children you had last year were retained in kindergarten or assigned to a transitional class?

| 2 | 5 or more |
|---|---|
| 13% (218) | 9% (143) |

XXX. In terms of achieving identified objectives, list any important needs not covered in this questionnaire.

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Number in Sample 102

JOINT LEGISLATIVE SUBCOMMITTEE OF THE GENERAL ASSEMBLY

STUDY OF KINDERGARTEN

QUESTIONNAIRE FOR KINDERGARTEN CONTACT PERSONS

School Division

I. Check grades you have taught.

| | | |
|---|---|---|
| 23.5% | (24) | (1) ___Kindergarten |
| 56% | (57) | (2) ___Primary |
| 76.5% | (78) | (3) ___Elementary |
| 42% | (43) | (4) ___Middle School |
| 45% | (46) | (5) ___High School |
| | 0 | ___No response |

II. Rank in order (1 high - 5 low) the major influences that determine what is taught in kindergarten in your school division.

| | Rank Order | |
|---|---|---|
| (1) | 2 | Program objectives identified in "A Guide for Kindergarten Education" |
| (2) | 4 | Programs or textbooks |
| (3) | 1 | Locally developed curriculum guides |
| (4) | 5 | Parent's preference |
| (5) | 3 | Other (Please specify) |
| | 0 | No response |

III. Mark the three greatest strengths of the kindergarten program in your division. (Mark only three)

| | | Rank Order | |
|---|---|---|---|
| 54% | (55) | (1) 1 | Pupil-teacher interaction |
| 23.5% | (24) | (2) ___ | Individualization of instruction |
| 33% | (34) | (3) ___ | Content of the curriculum |
| 22.5% | (23) | (4) ___ | Use of instructional materials |
| 47% | (48) | (5) ___ | Teachers' acceptance of and empathy for children |
| 51% | (52) | (6) 2 | Diversified child-centered experiences |
| 14% | (14) | (7) ___ | Cooperation among teachers |
| 48% | (49) | (8) 3 | Strong teaching staff |
| 4% | ( 4) | (9) ___ | Other (Please specify) |
| | ( 0) | ___ | No response |

IV. Mark the six most urgent needs of your kindergarten program in order to achieve the objectives you consider important. (Mark only six)

| | | Rank Order | |
|---|---|---|---|
| 48% | (49) | (1) 2 | Improved communication with parents |
| 22.5% | (23) | (2) ___ | Positive communication among teachers |
| 71% | (72) | (3) 1 | Communication between kindergarten and first grade |
| 26.5% | (27) | (4) ___ | Improved classroom space |
| 21% | (21) | (5) ___ | Improved instructional materials |
| 20% | (20) | (6) ___ | Improved playgrounds |
| 45% | (46) | (7) 3 | Understanding of child development and learning styles of children |
| 32% | (33) | (8) ___ | Smaller pupil-teacher ratio |
| 42% | (43) | (9) 4 | Improved staff development programs for teachers |
| 35% | (36) | (10) 6 | Planning time for teachers |
| 21% | (21) | (11) ___ | Aides in classrooms |
| 35% | (36) | (12) 6 | Involvement of parents in school experiences |
| 28% | (29) | (13) ___ | Improved classroom management techiques |
| 29% | (30) | (14) ___ | Individualization of instruction |
| 39% | (40) | (15) 5 | Clarified philosophy of Early Childhood Education |
| 22% | (22) | (16) ___ | Locally developed curriculum guides |
| 7% | ( 7) | (17) ___ | Fewer extracurricular activities for teachers |
| 0% | | ___ | No response |

V. Which of the following dates do you deem the most appropriate cut-off date for entrance in kindergarten?

| | | FIVE BY: | |
|---|---|---|---|
| 64% | (65) | (1) ___ | September 30 |
| 12% | (12) | (2) ___ | October 31 |
| 2% | ( 2) | (3) ___ | November 30 |
| 22.5% | (23) | (4) ___ | December 31 |
| 0% | | ___ | No response |

VI. In terms of achieving kindergarten objectives, list any important needs not covered in this questionnaire.

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Sample 694

JOINT LEGISLATIVE SUBCOMMITTEE OF THE GENERAL ASSEMBLY

STUDY OF KINDERGARTEN

QUESTIONNAIRE FOR PRINCIPALS

I. Circle number of kindergarten teachers in your school.

| | | | | 5 or more | No response |
|---|---|---|---|---|---|
| 31% (213) | 33% (231) | 17% (116) | 10% (67) | 8% (58) | 1% (9) |

II. Check number of years you have been an elementary school principal.

8% ( 53) (1) ___ 1st year

27% (187) (2) 2 - 5 years

21% (145) (3) 6 - 9 years

43% (301) (4) ___ 10 or more years

1% (8 ) No response

III. Is an orientation meeting for parents of kindergarten children conducted prior to school entrance?

82% (567) __Yes 17% (118) ___No 1% (9) ___ No response

IV. Is there a central office person in your division with early childhood responsibilities available to assist you and the teachers with kindergarten programs?

86% (596) __Yes 12% (83) No 2% (15) No response

V. Is a readiness test given in kindergarten or first grade?

96% (668) __Yes 2% (17) No 1% (9) ___ No response

If yes, check time given.

18% (123) (1) ___ Kindergarten - fall

54% (358) (2) ___Kindergarten - spring

27% (182) (3) ___First Grade

If yes, name of test _____

VI. Rank in order (1 high - 5 low) the major influences that determine what is taught in kindergarten in your school.

Rank Order

(1) _2_ Program objectives identified in "A Guide for Kindergarten Education"

(2) _3_ Programs or textbooks

(3) _1_ Locally developed curriculum guides

(4) _5_ Parents' preference

(5) _4_ Other (Please specify) _____

VII. Which of the following dates do you deem the most appropriate cut-off date for entrance in kindergarten?

FIVE BY:

64% (445) (1) ___September 30

14% ( 97) (2) ___October 31

1% ( 10) (3) ___November 30

18% (124) (4) ___December 31

3% ( 18) No response

VIII. Check the number of eligible children in your school district whose parents chose not to send their child to kindergarten last year?

21% (144) (1) ___One

16% (108) (2) ___Two

8% ( 54) (3) ___Three

3% ( 22) (4) ___Four

6% ( 44) (5) ___Five or more

37% (258) (6) ___Not known

9% ( 64) No response

IX. Mark the three greatest strengths of the kindergarten program in your viewpoint. (Mark only three)

3 Greatest Strengths

61% (425) (1) _1_ Pupil-teacher interaction

31% (213) (2)___Individualization of instruction

33% (226) (3) ___Content of the curriculum

19% (130) (4) ___Use of instructional materials

44% (303) (5) _3_ Teachers' acceptance of and empathy for children

53.5% (371) (6) _2_ Diversified child centered experiences

9% ( 60) (7) ___Cooperation among teachers

42.5% (295) (8) ___Strong teaching staff

3% ( 22) (9) ___Other (Please specify) _____

(0 ) No response

X. Mark the six most urgent needs of your kindergarten program in order to achieve the objectives you consider important. (Mark only six)

| | | | 6 Most Urgent Needs | |
|---|---|---|---|---|
| 39% | (273) | (1) | 6 | Improved communication with parents |
| 14% | ( 96) | (2) | | Positive communication among teacher |
| 50% | (347) | (3) | 1 | Communication between kindergarten and first grade |
| 21% | (144) | (4) | | Improved classroom space |
| 21.5% | (149) | (5) | | Improved instructional materials |
| 28% | (193) | (6) | | Improved playgrounds |
| 42% | (291) | (7) | 2 | Understanding of child development and learning styles of children |
| 42% | (289) | (8) | 3 | Smaller pupil-teacher ratio |
| 25% | (172) | (9) | | Improved staff development for teachers |
| 40% | (280) | (10) | 4 | Planning time for teachers |
| 37% | (259) | (11) | | Aidesin classrooms |
| 37.5% | (260) | (12) | | Involvement of parents in school experiences |
| 16% | (114) | (13) | | Improved classroom management techniques |
| 31% | (216) | (14) | | Individualization of instruction |
| 40% | (276) | (15) | 5 | Clarified philosophy of Early Childhood Education |
| 19% | (132) | (16) | | Locally developed curriculum guides |
| 10% | ( 71) | (17) | | Fewer extra curriculum activities for teachers |
| | ( 0) | | | No response |

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JOINT LEGISLATIVE SUBCOMMITTEE OF THE GENERAL ASSEMBLY

STUDY OF KINDERGARTEN

QUESTIONNAIRE FOR P. T. A. PRESIDENTS

I. Have the parents in your school been involved in planning and implementing the kindergarten curriculum?

29.5% (84) Yes

66% (189) No

4% (12) No response

II. In what ways have the parents in your school been involved in kindergarten? (Check all that apply)

74% (210) Voluntary Aides

49% (139) Resource Persons

26% ( 74) Committee Assignments

34% ( 98) Other (Please be specific)

( 0 ) No response

III. Have the parents in your school expressed an interest in greater involvement in kindergarten curriculum planning?

40% (114) Yes

54% (155) No

6% ( 16) No response

IV. For what reasons have the parents in your school not been involved in kindergarten? (Check all that apply)

45% (128) (1) ___ No one has asked them.

30.5% ( 87) (2) ___ Parents do not have time.

19% ( 55) (3) ___ Parents do not want to be involved.

37.5% (107) (4) ___ Other (Please be specific)

( 0 ) ___ No response

---

V. Which of the following dates do you deem the most appropriate cut-off date for entrance in kindergarten?

FIVE BY:

53% (152) (1) ___September 30

20% ( 58) (2) ___October 31

3.5% ( 10) (3) ___November 30

21% (60 ) (4) ___December 31

2% ( 5) ___No response

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C I. Rank in order (1 high - 5 low) the major influences that determine what is taught in kindergarten in your school division.

| Contact Person | Principal | |
|---|---|---|
| 2 | 2 | (1) __Program objectives identified in "A Guide for Kindergarten Education" |
| 4 | 3 | (2) __Programs or textbooks |
| 1 | 1 | (3) __Locally developed curriculum guides |
| 5 | 5 | (4) __Parent's preference |
| 3 | 4 | (5) __Other (Please specify) |

C II. Mark the three greatest strengths of the kindergarten program in your division. (Mark only three)

| Contact Person | Principal | |
|---|---|---|
| 1 | 1 | (1) __Pupil-teacher interaction |
| | | (2) __Individualization of instruction |
| | | (3) __Content of the curriculum |
| | | (4) __Use of instructional materials |
| | 3 | (5) __Teachers' acceptance of and empathy for children |
| 2 | 2 | (6) __Diversified child-centered experiences |
| | | (7) __Cooperation among teachers |
| 3 | | (8) __Strong teaching staff |
| | | (9) __Other (Please specify) _____ |

C III. Mark the six most urgent needs of your kindergarten program in order to achieve the objectives you consider important. (Mark only six)

| Contact Person | Principal | |
|---|---|---|
| 2 | 4 | (1) __Improved communication with parents |
| | | (2) __Positive communication amony teachers |
| 1 | 1 | (3) __Communication between kindergarten and first grade |
| | | (4) __Improved classroom space |
| | | (5) __Improved instructional materials |
| | | (6) __Improved playgrounds |
| 3 | 2 | (7) __Understanding of child development and learning styles of children |
| | 3 | (8) __Smaller pupil-teacher ratio |
| 4 | | (9) __Improved staff development programs for teachers |

| Contact Person | Principal | |
|---|---|---|
| 6 | | (10) __Planning time for teachers |
| | 6 | (11) __Aides in classrooms |
| 6 | 5 | (12) __Involvement of parents in school experiences |
| | | (13) __Improved classroom management techniques |
| | | (14) __Individualization of instruction |
| 5 | | (15) __Clarified philosophy of Early Childhood Education |
| | | (16) __Locally developed curriculum guides |
| | | (17) __Fewer extracurricular activities for teachers |

C IV. Which of the following dates do you deem the most appropriate cut-off date for entrance in kindergarten?

| FIVE BY: | Kindergarten Teachers | Principals | Kindergarten Contact Persons | P.T.A. Presidents |
|---|---|---|---|---|
| September 30 | 70.0% (1164) | 64.0% (445) | 63.7% (65) | 53.3% (152) |
| October 31 | 15.6% ( 260) | 14.0% ( 97) | 11.8% (12) | 20.4% ( 58) |
| November 30 | 3.0% ( 44) | 1.4 (10) | 2.0% ( 2) | 3.5% ( 10) |
| December 31 | 10.6% ( 176) | 17.9% (124) | 22.5% (23) | 21.1% ( 60) |
| No response | 1.2% ( 20) | 3% ( 18) | 0 | 1.8% ( 5) |

JOINT LEGISLATIVE SUBCOMMITTEE OF THE GENERAL ASSEMBLY
QUESTIONNAIRE FOR KINDERGARTEN TEACHERS
STUDY OF KINDERGARTEN

School Division _____ School _____

I. Your Experience

___ Number of years taught kindergarten
___ Number of years taught another grade

II. Circle grades you have taught

1 2 3 4 5 6 7 H (High School)

III. Circle the number of kindergarten teachers in your school

1 2 3 4 5 6 or more

PLEASE RESPOND ACCORDING TO YOUR PRESENT CLASS.

WHAT EFFECT DOES THIS HAVE ON ACHIEVEMENT OF THE OBJECTIVES YOU CONSIDER IMPORTANT?

IV. What is your organizational pattern? (1) No Effect (2) Assists (3) Hinders

(1)__ Self contained

(2)__ Team teaching

(3)__ Departmentalized

(4)__ Other (Please specify) _____

V. How many sections do you teach daily? (1) No Effect (2) Assists (3) Hinders

(1)__ One section (2)__ Two sections

If one section, answer question VI.
If two sections, answer question VII.

VI. How many children do you have enrolled? (1) __ No Effect (2) Assists (3) Hinders

(1)__ Under 20

(2)__ 20 - 25

(3)__ 26 - 30

(4)__ Over 30

VII. How many children do you have enrolled?

| A.M. | P.M. | A.M. |
|---|---|---|
| (1)____ | (1)____ Under 20 | (1) No Effect (2) Assists (3) Hinders |
| (2)____ | (2)____ 20 - 25 | P.M. |
| (3)____ | (3)____ 26 - 30 | P.M. |
| (4)____ | (4)____ Over 30 | (1) __ No Effect (2) Assists (3) Hinders |

PLEASE RESPOND ACCORDING TO YOUR PRESENT CLASS.

WHAT EFFECT DOES THIS HAVE ON ACHIEVEMENT OF THE OBJECTIVES YOU CONSIDER IMPORTANT?

VIII. Do you have a paid aide in your classroom? (1) __ No Effect (2) __ Assists (3) Hinders

(1)__ Full time

(2)__ One-half time or more

(3)__ Less than one-half time

(4)__ No

IX. Do you have help of specialists?

Yes No

| | | | |
|---|---|---|---|
| Music | (1) __ No Effect | (2) __ Assists | (3) __ Hinders |
| Art | (1) No Effect | (2) __ Assists | (3) __ Hinders |
| Physical Education | (1) __ No Effect | (2) Assists | (3) Hinders |
| Speech | (1) __ No Effect | (2) Assists | (3) __ Hinders |
| | (1) __ No Effect | (2) Assists | (3) Hinders |

X. How many hours per week do you have volunteer help on a regular basis? (1) No Effect (2) Assists (3) __ Hinders

(1)__ No volunteer help (4)__ 3 hours

(2)__ 1 hour (5)__ 4 hours or more

(3)__ 2 hours

XI. How much scheduled planning time do you have a week during the time children are in school? (1) __ No Effect (2) Assists (3) Hinders

(1)__ None (4)__ 2 hours

(2)__ 30 minutes (5)__ 3 hours or more

(3)__ 1 hour

XII. Do you have one or more diagnosed special education student/s in your room? (1) __ No Effect (2) Assists (3) Hinders

Full time Yes No

Part time Yes No

XIII. Approximately what percentage of your children attended nursery school prior to enrolling in kindergarten? (1) __ No Effect (2) Assists (3) Hinders
(Check one only)

(1)__ None (4)__ 51% - 75%

(2)__ 25% or fewer (5)__ More than 75%

(3)__ 26% - 50%

PLEASE RESPOND ACCORDING TO YOUR PRESENT CLASS.

WHAT EFFECT DOES THIS HAVE ON ACHIEVEMENT OF THE OBJECTIVES YOU CONSIDER IMPORTANT?

XIV. Do you have freedom in the use of teaching materials? (1) __ No Effect (2) __ Assists (3) __ Hinders

Yes No

XV. Do you have freedom to schedule your program to fit the needs of your children? (1) __ No Effect (2) Assists (3) Hinders

Yes No

XVI. Is your philosophy of Early Childhood Education consistent with:

Yes No Other kindergarten teachers in your school (1) __ No Effect (2) Assists (3) __ Hinders

Yes No Other primary teachers (1) __ No Effect (2) Assists (3) __ Hinders

Yes No Your principal (1) __ No Effect (2) Assists (3) __ Hinders

Yes No Central office staff (1) No Effect (2) __ Assists (3) __ Hinders

Yes No Parents (1) __ No Effect (2) Assists (3) Hinders

XVII. Your playground is:
(Check all that apply)

Yes No Available to you throughout the day

Yes No Designed for use by primary children

Yes No Contains needed equipment

XVIII. Your classroom facility:
(Check all that apply)

Yes No Contains toilet/s

Yes No Has direct exit to outside

Yes No Has storage space

XIX. Your classroom space:

(1)__ Adequate

(2)__ Too small

(3)__ Too large

XX. Your teaching materials are:

Yes No Appropriate in quality

Yes __ No Adequate in quantity

XXI. Check your major ways of communicating with parents about their children's progress. (Check all that apply)

(1) __ Report Cards
(2) Home Visits
(3) Checklists
(4) __ Telephone Conversation
(5) Personal Letters
(6) Parent Conferences
(7) Newsletters
(8) Other (Please specify)

XXII. Are the following areas of instruction included in your kindergarten program?

| | Yes | No |
|---|---|---|
| Health | | |
| Physical Education | | |
| Music | | |
| Art | | |
| Science | | |
| Mathematics | | |
| Language Arts | | |
| Social Studies | | |

XXIII. Which of the following dates do you deem the most appropriate cut-off date for entrance in kindergarten?

FIVE BY:

(1) ___ September 30
(2) October 31
(3) November 30
(4) December 31

XXIV. Check below all of the statements with which you agree:

(1) __ Existing kindergarten and first grade programs are inappropriate for children who entered school less than 5 years old.

(2) __ Programs in kindergarten and first grade can be made flexible enough to meet needs of all eligible children.

(3) __ Children 4 years 8 months to 5 years old can benefit from planned experiences with other children.

(4) __ Kindergarten children are often pressured to perform beyond their developmental levels.

(5) __ The attention span of most children 4 years 8 months to 5 years old is too short for school experiences.

(6) __ School offers a better learning environment than many children would have otherwise.

XXV. How many children did you recommend for retention or assignment to a transitional class last year?

0 1 2 3 4 5 or more

XXVI. How many children in item 25 had birthdays between October 1 and December 31.

0 1 2 3 4 5 or more

XXVII. How many children in item 25 were recommended for retention or assignment to a transitional class for the following reasons?

They lacked social/emotional maturity.

0 1 2 3 4 5 or more

They lacked physical maturity.

0 1 2 3 4 5 or more

They failed to attain kindergarten minimum skills.

0 1 2 3 4 5 or more

The first grade program was unsuited to their needs.

0 1 2 3 4 5 or more

XXVIII. Is retention in kindergarten or assignment to a transitional class an option in your school?

Yes No

XXIX. How many of the children you had last year <u>were</u> retained in kindergarten or assigned to a transitional class?

1 2 3 4 5 or more

XXX. In terms of achieving identified objectives, list any important needs not covered in this questionnaire.

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JOINT LEGISLATIVE SUBCOMMITTEE OF THE GENERAL ASSEMBLY
STUDY OF KINDERGARTEN
QUESTIONNAIRE FOR KINDERGARTEN CONTACT PERSONS

School Division _____

I. Check grades you have taught.

(1)__ Kindergarten

(2)__ Primary

(3)__ Elementary

(4)__ Middle School

(5)__ High School

II. Rank in order (1 high - 5 low) the major influences that determine what is taught in kindergarten in your school division.

(1)__ Program objectives identified in "A Guide for Kindergarten Education"

(2)__ Programs or textbooks

(3)__ Locally developed curriculum guides

(4)__ Parent's preference

(5)__ Other (Please specify) _____

III. Mark the three greatest strengths of the kindergarten program in your division.. (Mark only three)

(1)__ Pupil-teacher interaction

(2)__ Individualization of instruction

(3)__ Content of the curriculum

(4)__ Use of instructional materials

(5)__ Teachers' acceptance of and empathy for children

(6)__ Diversified child-centered experiences

(7)__ Cooperation among teachers

(8)__ Strong teaching staff

(9)__ Other (Please specify)_____

IV. Mark the six most urgent needs of your kindergarten program in order to achieve the objectives you consider important. (Mark only six)

(1)__ Improved communication with parents

(2)__ Positive communication among teachers

(3)__ Communication between kindergarten and first grade

(4)__ Improved classroom space

(5)__ Improved instructional materials

(6)__ Improved playgrounds

(7)__ Understanding of child development and learning styles of children

(8)__ Smaller pupil-teacher ratio

(9)__ Improved staff development programs for teachers

(10)__ Planning time for teachers

(11)__ Aides in classrooms

(12)__ Involvement of parents in school experiences

(13)__ Improved classroom management techniques

(14)__ Individualization of instruction

(15)__ Clarified philosophy of Early Childhood Education

(16)__ Locally developed curriculum guides

(17)__ Fewer extracurricular activities for teachers

V. Which of the following dates do you deem the most appropriate cut-off date for entrance in kindergarten?

FIVE BY:

(1)__ September 30

(2)__ October 31

(3)__ November 30

(4)__ December 31

VI. In terms of achieving kindergarten objectives, list any important needs not covered in this questionnaire.

PLEASE RETURN TO:

KINDERGARTEN SUPERVISOR
DEPARTMENT OF EDUCATION
P. O. BOX 6Q
RICHMOND, VA 23216

JOINT LEGISLATIVE SUBCOMMITTEE OF THE GENERAL ASSEMBLY
STUDY OF KINDERGARTEN
QUESTIONNAIRE FOR PRINCIPALS

School Division _____

School _____

I. Circle number of kindergarten teachers in your school.

1 2 3 4 5 or more

II. Check number of years you have been an elementary school principal.

(1)___ 1st year

(2)___ 2 - 5 years

(3)___ 6 - 9 years

(4)___ 10 or more years

III. Is an orientation meeting for parents of kindergarten children conducted prior to school entrance?

Yes No

IV. Is there a central office person in your division with early childhood responsibilities available to assist you and the teachers with kindergarten programs?

Yes No

V. Is a readiness test given in kindergarten or first grade?

Yes No

If yes, check time given.

(1) ___ Kindergarten - fall

(2) ___ Kindergarten - spring

(3) ___ First grade

If yes, name of test _____

VI. Rank in order (1 high - 5 low) the major influences that determine what is taught in kindergarten in your school.

(1) Program objectives identified in "A Guide for Kindergarten Education"

(2) Programs or textbooks

(3) ___ Locally developed curriculum guides.

(4) ___ Parents' preference

(5) Other (Please specify) _____

VII. Which of the following dates do you deem the most appropriate cut-off date for entrance in kindergarten?

FIVE BY:

(1)___ September 30

(2)___ October 31

(3)___ November 30

(4)___ December 31

VIII. Check the number of eligible children in your school district whose parents chose not to send their child to kindergarten last year?

(1)___ One

(2)___ Two

(3)___ Three

(4)___ Four

(5)___ Five or more

(6)___ Not known

IX. Mark the three greatest strengths of the kindergarten program in your viewpoint. (Mark only three)

(1)___ Pupil-teacher interaction

(2)___ Individualization of instruction

(3)___ Content of the curriculum

(4)___ Use of instructional materials

(5)___ Teachers' acceptance of and empathy for children

(6)___ Diversified child centered experiences

(7)___ Cooperation among teachers

(8)___ Strong teaching staff

(9)___ Other (Please specify) _____

X. Mark the six most urgent needs of your kindergarten program in order to achieve the objectives you consider important. (Mark only six)

(1) ___ Improved communication with parents

(2) ___ Positive communication among teachers

(3) ___ Communication between kindergarten and first grade

(4) ___ Improved classroom space

(5) ___ Improved instructional materials

(6) ___ Improved playgrounds

(7) ___ Understanding of child development and learning styles of children

(8) ___ Smaller pupil-teacher ratio

(9) ___ Improved staff development for teachers

(10) ___ Planning time for teachers

(11) ___ Aides in classrooms

(12) ___ Involvement of parents in school experiences

(13) ___ Improved classroom management techniques

(14) ___ Individualization of instruction

(15) ___ Clarified philosophy of Early Childhood Education

(16) Locally developed curriculum guides

(17) Fewer extra curriculum activities for teachers

XI. In terms of achieving kindergarten objectives, list any important needs not covered in this questionnaire.

PLEASE RETURN TO:

KINDERGARTEN SUPERVISOR
DEPARTMENT OF EDUCATION
P. O. BOX 6Q
RICHMOND, VA 23216

JOINT LEGISLATIVE SUBCOMMITTEE OF THE GENERAL ASSEMBLY
STUDY OF KINDERGARTEN
QUESTIONNAIRE FOR P. T. A. PRESIDENTS

School Division _____

School _____

I. Have the parents in your school been involved in planning and implementing the kindergarten curriculum?

Yes No

II. In what ways have the parents in your school been involved in kindergarten? (Check all that apply)

___ Voluntary Aides

Resource Persons

___ Committee Assignments

___ Other (Please be specific) _____

III. Have the parents in your school expressed an interest in greater involvement in kindergarten curriculum planning?

Yes No

IV. For what reasons have the parents in your school not been involved in kindergarten? (Check all that apply)

(1) No one has asked them.

(2) Parents do not have time.

(3) Parents do not want to be involved.

(4) ___ Other (Please be specific)

V. Which of the following dates do you deem the most appropriate cut-off date for entrance in kindergarten?

FIVE BY:

(1) ___ September 30

(2) ___ October 31

(3) ___ November 30

(4) ___ December 31

PLEASE RETURN TO:

KINDERGARTEN SUPERVISOR
DEPARTMENT OF EDUCATION
P. O. BOX 6Q
RICHMOND, VA 23216

JOINT LEGISLATIVE SUBCOMMITTEE OF THE GENERAL ASSEMBLY
OBJECTIVES QUESTIONNAIRE
STUDY OF KINDERGARTEN
OCTOBER 1978

SCHOOL DIVISION _____

POSITION: (Check one)

P.T.A. President

Teacher

___ Principal

___ Kindergarten Contact Person

| Is this an objective in your classroom or school? | | | Circle according to the degree of importance you believe the objective should have in kindergarten. 1. very important 2. important 3. unimportant 4. undecided |
|---|---|---|---|
| Yes | No | THE CHILD WILL GROW EMOTIONALLY AND DEMONSTRATE GROWTH BY: | |
| | | 1. Discovering self: likes, dislikes, attitudes, strengths, needs, and limitations. | 1 2 3 4 |
| | | 2. Devel | 1 2 3 4 |
| | | 3. Facin roblems and att ting to solve them. | 1 2 3 4 |
| | | 4. Persist ' ' in efforts. | 1 2 3 4 |
| | | 5. 'Exhibit' | 1 2 3 4 |
| | | 6. | 1 2 3 4 |
| | | THE CHILD WILL GROW SOCIALLY AND DEMONSTRATE GROWTH BY: | |
| | | 7. with individuals and | 1 2 3 4 |
| | | 8. Develo in re ect for the ri hts and feelings of others. | 1 2 3 4 |
| | | 9. Participating in class activities. | 1 2 3 4 |
| | | 10. limits involved with liv' in a group situation. | 1 2 3 4 |
| | | THE CHILD WILL GROW IN ABILITY TO COMMUNICATE AND DEMONSTRATE GROWTH BY: | |
| | | 11. Talkin and listening to children and adults. | 1 2 3 4 |
| | | 12. Dictating original stories and poems. | 1 2 3 4 |
| | | 13 le oral directions. | 1 2 3 4 |
| | | 14. Telling an experience or a story in sequence. | 1 2 3 4 |
| | | 15. Ask' le how, what and | 1 2 3 4 |

OBJECTIVES QUESTIONNAIRE

| Yes | No | | | | | |
|---|---|---|---|---|---|---|
| | | **THE CHILD WILL GROW PHYSICALLY AND DEMONSTRATE GROWTH BY:** | | | | |
| | | 16. Devel muscular control and coordination. | 1 | 2 | 3 | 4 |
| | | 17. Practicin ood nutritional habits. | 1 | 2 | 3 | 4 |
| | | 18. Devel a sense of balance. | 1 | 2 | 3 | 4 |
| | | 19. Obse safet rules. | 1 | 2 | 3 | 4 |
| | | **THE CHILD WILL GROW AESTHETICALLY AND DEMONSTRATE GROWTH BY:** | | | | |
| | | 20. Experimenting with paints, crayons, clay, and other art media. | 1 | 2 | 3 | 4 |
| | | 21. Increasing awareness and appreciation of color, design, form r hm and sound. | 1 | 2 | 3 | 4 |
| | | 22. melodies. | 1 | 2 | 3 | 4 |
| | | 23. Becoming aware of and appreciating contributions of various individuals and cultures. | 1 | 2 | 3 | 4 |
| | | **THE CHILD WILL GROW INTELLECTUALLY AND DEMONSTRATE GROWTH BY:** | | | | |
| | | 24. Beginning to observe, inquire, infer, predict, and draw conclusions. | 1 | 2 | 3 | 4 |
| | | 25. | 1 | 2 | 3 | 4 |
| | | 26. about the environment. | 1 | 2 | 3 | 4 |
| | | 27. familiar ob ects as models of real ob ects. | 1 | 2 | 3 | 4 |
| | | 28. ob ects on basis of likeness or us e. | 1 | 2 | 3 | 4 |
| | | 29. Realiz that books and words have mean | 1 | 2 | 3 | 4 |
| | | 30. Devel in visual discrimination. | 1 | 2 | 3 | 4 |
| | | 31. Learning to discriminate rhythms, sounds, and origin of sounds. | 1 | 2 | 3 | 4 |
| | | 32. Becomin ssion. | 1 | 2 | 3 | 4 |
| | | 33. Bec aware of al habet names. | 1 | 2 | 3 | 4 |
| | | 34. Understanding the variety of roles people in the home, school and communi la . | 1 | 2 | 3 | 4 |
| | | 35. Order ob ects. | 1 | 2 | 3 | 4 |
| | | 36. tterns. | 1 | 2 | 3 | 4 |
| | | 37. Us numbers in eve da work and la . | 1 | 2 | 3 | 4 |

Please list other objectives you consider important

PLEASE RETURN TO:

KINDERGARTEN SUPERVISOR
DEPARTMENT OF EDUCATION
P. O. BOX 6Q
RICHMOND, VA 23216

COMMONWEALTH OF VIRGINIA

HOUSE OF DELEGATES

RICHMOND

DOROTHY S. McDIARMID
390 MAPLE AVENUE, EAST
VIENNA, VIRGINIA 22180

EIGHTEENTH DISTRICT
FAIRFAX COUNTY, THAT PORTION IN THE TENTH CONGRESSIONAL DISTRICT, AND THE CITIES OF FAIRFAX AND FALLS CHURCH

COMMITTEE ASSIGNMENTS:
EDUCATION
APPROPRIATIONS
AGRICULTURE

October 14, 1978

Dear P.T.A. President:

The 1978 session of the Virginia General Assembly passed Joint House Resolution No. 146 calling for a study of kindergarten programs. The legislation is in response to citizen concerns voiced during public hearings on school entrance age during fall, 1977. A copy of the resolution is attached.

Subcommittees of the House Education Committee and Senate Education and Health Committee have begun to implement a study which we believe will provide valuable information about kindergarten in Virginia. Questionnaires are being sent to all kindergarten teachers, their principals, school division kindergarten contact persons, and elementary school Parent Teacher Association presidents. As required in the resolution, Department of Education personnel have assisted the committee in the study and will receive the completed questionnaires.

Your assistance is needed to determine:

1. What kindergarten objectives do parents feel are important?

2. What involvement do parents have in kindergarten programs?

Please complete the enclosed questionnaires according to your beliefs about kindergarten whether you have a child in kindergarten or not. Using the return address, postpaid envelope, please return completed forms by November 1 to The Department of Education. The questionnaires must be returned promptly for the committee to have sufficient time to prepare recommendations for the 1979 session of the General Assembly.

Thank you for your assistance in this matter.

Sincerely,

Dorothy S. McDiarmid

(Mrs.) Dorothy S. McDiarmid

COMMONWEALTH OF VIRGINIA
HOUSE OF DELEGATES
RICHMOND

DOROTHY S. McDIARMID
390 MAPLE AVENUE, EAST
VIENNA, VIRGINIA 22180

EIGHTEENTH DISTRICT
FAIRFAX COUNTY, THAT PORTION IN THE TENTH CONGRESSIONAL DISTRICT, AND THE CITIES OF FAIRFAX AND FALLS CHURCH

COMMITTEE ASSIGNMENTS:
EDUCATION
APPROPRIATIONS
AGRICULTURE

October 14, 1978

Dear Kindergarten Contact Person:

The 1978 session of the Virginia General Assembly passed Joint House Resolution No. 146 calling for a study of kindergarten programs. The legislation is in response to citizen concerns voiced during public hearings on school entrance age during fall, 1977. A copy of the resolution is attached.

Subcommittees of the House Education Committee and Senate Education and Health Committee have begun to implement a study which we believe will provide valuable information about kindergarten in Virginia. Questionnaires are being sent to all kindergarten teachers, their principals, school division kindergarten contact persons, and elementary school Parent Teacher Association presidents. As required in the resolution, Department of Education personnel have assisted the committee in the study and will receive the completed questionnaires.

Enclosed are questionnaires for principals, kindergarten teachers, and P.T.A. presidents. Your division superintendent has been apprised of the plan to survey kindergartens in response to Joint House Resolution No. 146.

Your assistance in completing the study of kindergarten programs in Virginia is needed. We ask you to:

1. Please complete the enclosed questionnaires for kindergarten contact persons and return to The Department of Education by November 1.

2. Please encourage principals and teachers in your division to respond to all questions as completely and as accurately as possible and return to The Department of Education.

Using the return address, postpaid envelope, please return completed forms to The Department of Education. The questionnaires must be returned promptly for the committee to have sufficient time to prepare recommendations for the 1979 session of the General Assembly.

Thank you for your assistance in this matter.

Sincerely,

(Mrs.) Dorothy S. McDiarmid

CC: Division Superintendents

COMMONWEALTH OF VIRGINIA
HOUSE OF DELEGATES
RICHMOND

DOROTHY S. McDIARMID
390 MAPLE AVENUE, EAST
VIENNA, VIRGINIA 22180

EIGHTEENTH DISTRICT
FAIRFAX COUNTY, THAT PORTION IN THE TENTH CONGRESSIONAL DISTRICT, AND THE CITIES OF FAIRFAX AND FALLS CHURCH

COMMITTEE ASSIGNMENTS:
EDUCATION
APPROPRIATIONS
AGRICULTURE

October 14, 1978

Dear Kindergarten Teacher:

The 1978 session of the Virginia General Assembly passed Joint House Resolution No. 146 calling for a study of kindergarten programs. The legislation is in response to citizen concerns voiced during public hearings on school entrance age during fall, 1977. A copy of the resolution is attached.

Subcommittees of the House Education Committee and Senate Education and Health Committee have begun to implement a study which we believe will provide valuable information about kindergarten in Virginia. Questionnaires are being sent to all kindergarten teachers, their principals, school division kindergarten contact persons, and elementary school Parent Teacher Association presidents. As required in the resolution, Department of Education personnel have assisted the committee in the study and will receive the completed questionnaires.

Your assistance is greatly needed to provide first-hand information on the following questions:

1. What are the kindergarten objectives in Virginia?

2. What factors prevent Virginia kindergartens from achieving the identified objectives?

We request that you complete the objectives and teachers questionnaires as carefully and fully as possible. Using the return address postpaid envelope, please return completed forms by November 1 to the Department of Education. The questionnaires must be returned promtply for the committee to have sufficient time to prepare recommendations for the 1979 session of the General Assembly.

Thank you for your assistance in this matter.

Sincerely,

(Mrs.) Dorothy S. McDiarmid

CC: Division Superintendents

COMMONWEALTH OF VIRGINIA
HOUSE OF DELEGATES
RICHMOND

DOROTHY S. McDIARMID
390 MAPLE AVENUE, EAST
VIENNA, VIRGINIA 22180

EIGHTEENTH DISTRICT
FAIRFAX COUNTY, THAT PORTION IN THE TENTH CONGRESSIONAL DISTRICT, AND THE CITIES OF FAIRFAX AND FALLS CHURCH

COMMITTEE ASSIGNMENTS:
EDUCATION
APPROPRIATIONS
AGRICULTURE

October 14, 1978

Dear Elementary School Principal:

The 1978 session of the Virginia General Assembly passed Joint House Resolution No. 146 calling for a study of kindergarten programs. The legislation is in response to citizen concerns voiced during public hearings on school entrance age during fall, 1977. A copy of the resolution is attached.

Subcommittees of the House Education Committee and Senate Education and Health Committee have begun to implement a study which we believe will provide valuable information about kindergarten in Virginia. Questionnaires are being sent to all kindergarten teachers, their principals, school division kindergarten contact persons, and elementary school Parent Teacher Association presidents. As required in the resolution, Department of Education personnel have assisted the committee in the study and will receive the completed questionnaires.

Enclosed are questionnaires for principals, kindergarten teachers, cover letters and return envelopes. Your division superintendent has been apprised of the plan to survey kindergartens in response to Joint House Resolution No. 146.

Your assistance in completing the study of kindergarten programs in Virginia is needed. We ask you to:

1. Please complete the enclosed questionnaires for principals and return to The Department of Education by November 1.

2. Please distribute the teachers' questionnaires to your kindergarten teachers and encourage them to personally respond to all questions as completely and as accurately as possible. If you need additional copies, please duplicate the enclosed questionnaires you have in order to save time.

Using the return address, postpaid envelope please return completed forms by November 1 to The Department of Education. The questionnaires must be returned promptly for the committee to have sufficient time to prepare recommendations for the 1979 session of the General Assembly.

Thank you for your assistance in this matter.

Sincerely,

Dorothy S. McDiarmid

(Mrs.) Dorothy S. McDiarmid

CC: Division Superintendents

**AMENDMENT IN THE NATURE OF A SUBSTITUTE FOR HOUSE JOINT RESOLUTION NO. 146**

(Proposed by the House Committee on Education)

*Requesting the House Education Committee and the Senate Education and Health Committee to study certain aspects of public school kindergarten programs.*

WHEREAS, children of kindergarten age are undergoing rapid developmental changes and differ widely in their individual developmental patterns; and

WHEREAS, such children are developing attitudes toward self and school and, because of the influence of such attitudes on success in school and later life, it is important that the kindergarten experience have a positive effect; and

WHEREAS, such children need experiences consistent with their learning styles and developmental levels rather than programs designed just for cognitive development to achieve this effect; and

WHEREAS, rather than a curriculum based on this concept, the content previously taught in the first grade has become the curriculum in many kindergarten classrooms; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the House Education Committee and the Senate Education and Health Committee are requested to identify kindergarten program objectives and instructional methods which are consistent with the needs and learning styles of young children, to determine the factors which prevent public school kindergartens from achieving the identified program objectives, including class sizes, lengths and scheduling of school days, readiness and maturation levels of children, organizational patterns and teacher responsibilities, and to make such recommendations regarding public school kindergarten programs as they deem appropriate to the nineteen hundred seventy-nine session of the General Assembly.

The Committees may seek the assistance of not more than five citizen members in their study. The Department of Education is requested to cooperate with and assist the Committees with their study.

# APPENDIX G

JOINT LEGISLATIVE SUBCOMMITTEE OF THE GENERAL ASSEMBLY

STUDY OF KINDERGARTEN

QUESTIONNAIRE FOR KINDERGARTEN TEACHERS

SUMMARY OF ADDED COMMENTS

PROGRAM

"Children need control over their thinking, sight and hearing in order for structured academic learning. Therefore, I do not support reading as a part of a "K" curriculum. Children need to understand their body and their environment, as well as develop good listening skills prior to "first grade work". I do support readiness activities and feel they can lay the foundation for a successful educational experience for children."

"Living and learning in the kindergarten takes place in an atmosphere of freedom bounded by the respect of the rights of others."

"I think that it is most important for all kindergarten children to be taken academically as far as they can go. There is a great deal of difference in where this age child is, depending usually on their home. If a child is ready to read, then he should be allowed to begin. If a child is not ready for reading skills, he should not be pushed into any reading program. My main objectives for my classroom are to create a learning environment in which children want to learn and to make sure their first year of school is a happy, exciting, positive experience."

"There is no transitional class in my school. I feel this should be available as an option rather than merely retention in kindergarten with no supportive services."

"Programs in kindergarten and first grade can be made flexible enough to meet needs of all eligible children, but it's very difficult with large classes and teachers seem to be upset by children who can't work on level for maturity reasons."

"Children 4 years 8 months to 5 years old can benefit from planned experiences with other children - - very brief and first hand experiences are good."

"Philosophy clarification - It would be great if some member of the State Department staff, who is sold on the idea of meeting children's needs in kindergarten, could explain either in person or by newsletter, to the division superintendents how this program differs from the other primary grades in the amount of expendable supplies that are needed. Because of their exclusive training in secondary work, we are offered textbook and workbooks and receive only a smirk when we ask to substitute manipulative games, art supplies and weekly readers."

PROGRAM cont'd

"Perhaps there could be some specific guidelines set up as to what is actually expected of a kindergarten student in terms of alphabet recognition; beginning sounds and actual reading, and/or in the math readiness area also."

"The state should have two types of kindergartens

1) for children coming into school already knowing colors, shapes, letters, beg. cons. sounds, reading, etc... These children get bored very easily and parents give pressure.

2) a more social, "artsy" kindergarten for those who have never been to school before and are not ready for formal learning."

"Specialists need more time to spend working with children and doing less paper work."

"Too much paper work. In achieving Kindergarten objectives, we spend too much time keeping records on reading, math, B.L.S. records, report cards, permanent records. This leaves very little time for instruction. We need relief."

"Kindergarten and first grade should be made flexible enough to meet children's needs. First grade and kindergarten teachers find that younger children are having a harder time meeting the state minimum objectives."

"There have been a few programs which we have been instructed to use which have not been appropriate for our children."

LENGTH OF SCHOOL DAY

"Shorter day would be better for young children. They get very tired."

"Does the daily schedule allow for adequate teaching time in all areas? No - both sessions are required to eat lunch and lunch schedules take up a great deal of time each day."

"The establishment of routine. Smooth and gradual transition from home-play setting to school-academic setting; hence kindergarten day is 4½ hours compared to the 6 hours of grades 1-6."

"What wonderful things we could accomplish if students had a longer day - for example: 8:30 - 1:30. We need more time."

"It is very important and needed that we have full-day kindergarten for it will be beneficial to the children. It will also help aid in more individualized instruction."

LENGTH OF SCHOOL DAY cont'd

"Having all day kindergarten would help to reach a lot of these objectives."

"Too long a day for this age."

"The day is too long for kindergarten children."

"My children are in class fro 8:15 until 3:00. This is too long a day for kindergarten children!!! A 5-hour day would be much easier for them to cope with."

"The length of the school day has a lot to do with kindergarteners' ability to learn. About 5 hours would be ideal"

AGE

"Since children with October, November and December birthdays have been attending kindergarten (4 years old), we have had to retain several children each year. Many of them are quite immature."

"On the average, children younger than 5 are not ready for kindergarten, but chronological age is not always a factor. Ideally, some other criteria for placement should be used along with birthdays.

"I try to make the programs appropriate by being flexible, however, with the wide age range this is very difficult."

"Children from lower socio-economic levels or from families where one or both parents are relatively uneducated, often show younger behavior or more aggressive behavior than other youngsters of the same chronological age."

"I have taught where they had to be 5 before they entered, it does make a difference. There is so much expected of them that the younger child can't handle it."

"Why couldn't children be given entrance tests if their parents feel the child is ready for kindergarten but too young to enter school in case the entrance date is moved back?"

"I feel that the most important need is moving the enrollment date for kindergarten children back to either September 30, or October 31. I have worked with too many children who have not turned 5 until November or December and seen that they are not ready for school yet. If they had one more year in which to mature emotionally and physically. I feel they would make better progress."

"Age plays little importance in kindergarten success. Many 4 year olds can read and many 5 year olds don't know any colors. Each child is different. I favor getting them to school as early as possible."

AGE cont'd

"Perhaps a readiness program geared for 3 and 4 year olds would help the underpriviledged children. Many seem uncapable of learning because they have no readiness skills from the home environment."

"Most 4½ year olders are not ready for a kindergarten program. We have children in my class this year from 4½ to 6 years old. Some of these children need a nursery school program and others are very ready for a more structured program. It is important and necessary to prepare these young children, as much as possible, for a first grade program."

AIDES or PERSONNEL

"Would having a full-time aide be an asset to the program? Yes, especially since teachers are not given any planning time during the day."

"An aide is needed at least two hours during the day. An aide or volunteer is needed during the lunch period so the children can be encouraged to eat properly and use good manners. The kindergarten child should not be in school the entire school day."

"Aides are sorely needed in each kindergarten class. Consensus of opinion (kindergarten teachers and first grade)."

"There is a need for a qualified Early Childhood Specialist as a consultant to teachers. Need a full-time aide."

BACK TO BACK CLASSES

"I do not feel that kindergarten goals would be hard to obtain, if the children had a longer day, (instead of two sessions)."

"Are the students in the p.m. session given as many opportunities as the a.m. students" No - the teachers cannot give as much of themselves and the children miss out on field trips and other school programs."

"It would be helpful if sessions were not "back to back".

"Time for planning is desperately needed. Teachers cannot do their best if they go through an entire day with an average of 50 children and not any time to get materials organized. I am especially concerned about "back to back" classes and no opportunity to clean the room or have materials ready for p.m. class."

"I am also very concerned about the pressure at the first grade level that is creating a "watered down" first grade in the kindergarten. My county began Getting Ready to Read last year. This year teachers were using it for the beginning of the school year! This means that 4 year olds must be exposed to materials they are not able to handle."

"Our classes are run back to back, which makes it necessary for me to have lunch during the time the chil-ren are in class, and when I return, my aide goes to lunch. Because of this situation, we find we are often rushed at lunch. There is seldom time to straighten our room for the next class. We do not receive any breaks or planning time during the day. Planning must be done before school, after or at home. We do have early closings on Monday which is very helpful. We must make up snow days if there is late opening and the a.m. class does not come. This means we must have a.m. and p.m. classes together. Too many children crowded into one room

RETENTION:

"One weakness in the county is the lack of early screening programs for all kindergarten children. Speech, language delayed, emotionally disturbed, etc. If this were done at the kindergarten level, many problems could be corrected at an early age. Sending children to first grade in many county schools enables them to get adequate diagnostic testing which would not be available to them if retained in kindergarten."

"Retention in kindergarten as an option, depends upon parents and passing of the Basic Learning Skills Tests."

"Retention in kindergarten must be approved by the principal, the supervisor of instruction, and the parents."

"I feel we are not meeting the needs of children when we push them into kindergarten and first grade before they are ready. Parents are extremely sensitive (some) about their children repeating kindergarten. They feel the children have "failed" and that it is a reflection on them. The worse the parents self-image is the harder it is for them to accept the fact that their child is not ready to go on to the next grade. My experiences in first grade and kindergarten have taught me that it is most important to a child's self-image that he succeed! Would it not make more sense to have a 4 year kindergarten?"

"Often a parent will not agree to having a child repeat kindergarten, because it is only a half-day class."

## CLASS SIZE

"I have 42 children at 9:00 a.m., 14 at 10:00 a.m., and 21 at 10:45 a.m. Varied sized small groups for 5-10 children in p.m."

"It is too crowded to bring my class out during other scheduled recess time for other classes."

"I have close to 40 children and certainly I cannot meet all their needs as effectively as I could with 30."

"My classroom space is adequate, but designed for 25 instead of the 42 we're accomodating."

"My teaching materials are not adequate in quantity for the number of children we have acquired."

"The younger the child the smaller the class should be."

"Parents should enroll children early enough to assure proper plans for number of teachers, etc."

"I do feel the size of kindergarten in the Standards of Quality needs to be reduced. 25:1 is unreal with 4-5 year old children. Yes, it is done but not with the true kindergarten philosophy being carried out."

"This is highly unusual, to have under 20 students, and I have really noticed a very positive effect on group relationships and individual progress."

"I feel that kindergarten classes are too large to give the teacher a change to spend the time that these children need on an individual basis. They need a class of no more than 15, and a shorter school day than a 5 year old. They are insecure."

## PRESSURE ON CHILDREN AND TEACHERS

"The Basic Learning Skills requirements get away from the child's individual capabilities. The pressure on the children is way too much to perform many things they aren't yet ready to."

"In some instances pressure is exherted to speed pupil achievement and some children are not ready for structured academics at 5."

"We're asking children that are very young to achieve in areas in which he/she is not fully developed, to have success; i.e., handwriting, attention span, listening in a group and social responsibility."

"We try to create a happy learning environment in which children feel eager to learn through play activities. We try not to pressure the children."

MISCELLANEOUS

The need for interested, concerned parenting - no matter what the age, many children come to school with very few skills developed for the 4 or 5 year old. I realize there are varying levels of learning - learning begins in the home."

"I would like to just re-emphasize the fact that having 30 students in a small classroom is not beneficial to either teachers or students. My classroom was not constructed to be a kindergarten room, so appropriate facilities are not in this room. I plea with you to: roll back the kindergarten entrance age to September 30 or October 31; to require that class size be reduced to a maximum of 21 students; to abolish the right for any system to have back to back classes*, and to, hopefully, require 1 full day (5 hr.) session of kindergarten per day."

*"Most kindergartens in my system have back to back classes with no break between a.m. and p.m. classes. This provides no preparation time for p.m. classes and is a physical emotional burden on the teacher who hasn't time to even catch her breath before the p.m. class enters the room."

JOINT LEGISLATIVE SUBCOMMITTEE OF THE GENERAL ASSEMBLY

STUDY OF KINDERGARTEN

QUESTIONNAIRE FOR PRINCIPALS

SUMMARY OF WRITTEN COMMENTS

I. None

II. None

III. Is an orientation meeting for parents of kindergarten children conducted prior to school entrance?

Most schools have a visitation for parents either prior to or during the first weeks of school opening. One school stated that there was a home visit by the teachers prior to school.

IV. None

V. Is a readiness test given in kindergarten or first grade?

The overwhelming majority of principals stated that the Metropolitan Readiness Test was used in their schools. Two other tests used were the Santa Clara and the Primary Mental Abilities Others mentioned are listed below:

Gesell Developmental
Yellow Brick Road
Stanford Early Childhood Achievement
Comprehensive test of Basic Skills, State of Virginia
CPI
Epic
Ready Styn
Kindergarten Developmental Inventory
CTBS
Barlem
Houghton-Mifflin Reading Readiness
Walker Readiness Test
Lippincott Readiness
Peabody Achievement Test
Macmillan Reading Readiness
Kuhlmann-Anderson
Slingerland Pre-reading screening
CRS
DIAL
Mann-Suter
Lynchburg Public School Screening Test

VI. Rank in order the major influences that determine what is taught in kindergarten in your school.

1. The teacher preference or own developed program for the needs of the individual student.
2. Programs planned by the Principal, Teacher, and Parents or a combination of the three.
3. Basic skills as suggested by the State Department were also considered.
4. Local School Board policies.
5. Results of some of the readiness tests.

VII. Which of the following dates do you deem the most appropriate cut-off date for entrance in kindergarten?

1. September 30 would be most appropriate, anything earlier would be too old.
2. Chronological age is not realistic - measure readiness.
3. Date should be consistent and uniform with neighboring States with families on the move.
4. Do not change the date again - give time to work on curriculum.
5. Spend time on method of determining when child is ready.

VIII. Check the number of eligible children in your school district whose parents chose not to send their child to kindergarten last year?

Parents chose not to send their child to kindergarten for the following reasons:

1. Religion
2. Private School
3. Recommendation by Gessell Readiness scores
4. Parent choice to hold child out for a year

IX. None

X. None

XI. Other comments.

Emphasis on the development of social skills which include respect for the rights of others, authority, honesty, truthfulness, manners and self-care were the most mentioned objectives. This could be done with the help of parents, aides, specialists and a state or locally developed program with guidelines for the kindergarten program in instruction, as well as, promotion and retention.

One concern was that it not become a baby-sitting program and to educate the parents better as to what is expected of a kindergartener. Maturity of the child makes the difference and the curriculum has to be for the very young as well as the older student.

It was generally agreed that a full day was better than a half day or a day with back-to-back sessions.

The other needs mentioned are listed below in two categories:

A. Child

1. Emotional/Social Emphasis - good self-image
   appreciation of beauty
   appreciation of successes
   oral language - most important
2. Definite need for a better assessment of a child's readiness for kindergarten to determine the following:

   1. On grade level
   2. Very young or immature
   3. Advanced - possible promotion

B. Classroom

1. Aides in each room - time for more individual help
2. Smaller teacher - pupil ratio
3. Full day - small class
4. Teacher - parent in service

JOINT LEGISLATIVE SUBCOMMITTEE OF THE GENERAL ASSEMBLY

STUDY OF KINDERGARTEN

QUESTIONNAIRE FOR P. T. A. PRESIDENTS

GENERAL COMMENTS

I. Have the parents in your school been involved in planning and implementing the kindergarten curriculum?

Parents are not involved in the planning of the kindergarten curriculum because they were not asked to be. Most felt that their program was good and few had been on a committee to review their Annual Plan.

II. In what ways have the parents in your school been involved in kindergarten?

Parents are most involved at school on a volunteer basis, primarily, Home Room Mothers and as chaperone on field trips. Other areas in which they help are listed below:

1. Bus monitors
2. Testing
3. Advisory Committee
4. Make teacher aids
5. Financial support
6. Volunteer aides for ESAA VII

III. Have the parents in your school expressed an interest in greater involvement in kindergarten curriculum planning?

Few of the Presidents expressed an interest for their parents to get more involved in the curriculum planning. They would like to see more reading skills taught. Others felt there was a good staff at their school and were not sure of their membership's interest.

IV. For what reasons have the parents in your school not been involved in kindergarten?

Most P.T.A. Presidents reported that parents are involved in the schools but on a volunteer basis with activities and not with the curriculum. Others would like to be involved but are unaware that they could have some input. Some parents felt they were not encouraged to participate, either by the Teacher or the Prinicpal. Some felt that the program was good and that they were not needed or qualified to help. A large group reported working parents and the single parent family as reasons not to be involved. However, few stated that they did not want to be involved at all.

V. Which of the following dates do you deem the most appropriate cut-off date for entrance in kindergarten?

September 30 was the most selected date for the cut-off date. October 31, December 31, August 15 and July 30 were also suggested.

Any date should be flexible for the varying stages of development of the child. To determine the readiness of a child to start school is their most concern.

The other needs mentioned are listed below in two categories:

Child

1. Social Emphasis
   - good self-image
   - appreciation of job and beauty
   - appreciation of successes
   - oral language - most important
2. Definite need for a better assessment of a child's readiness for kindergarten to determine the following:
   1. On level
   2. Very young or immature
   3. Advanced possible promotion

Classroom

1. Aides in each room - time for more individual help
2. Smaller teacher - pupil ratio
3. Full day - small class
4. Teacher - parent in service

JOINT LEGISLATIVE SUBCOMMITTEE OF THE GENERAL ASSEMBLY

STUDY OF KINDERGARTEN

QUESTIONNAIRE FOR KINDERGARTEN CONTACT PERSONS

GENERAL SUMMARY

I. None

II. Rank in order (1 high - 5 low) the major influences that determine what is taught in kindergarten in your school division.

Teacher training and preferences along with the needs of the individual child were the most factors listed for determining what was taught in kindergarten. A school policy, State or Local or the results of skills tests, also, have a determining factor.

III. Mark the three greatest strengths of the kindergarten program in your division.

Some strengths are listed below:

1. Aide in each classroom
2. Teacher - made games and media
3. Children are helped to see relationships in what they are learning through the unit approach.
   Advanced - more difficult
   Less - easier
4. Emphasis on total development - child

IV. Mark the six most urgent needs of your kindergarten program in order to achieve the objectives you consider important.

Other considerations were:

1. Alert to new materials
2. Parents involved with field trips, cooking, creative
3. P.T.A. working on playground

V. Which of the following dates do you deem the most appropriate cut-off date for entrance in kindergarten?

September 30 was selected if curriculum remains the same. October 31 was selected for the 79-80 year.

VI. In terms of achieving kindergarten objectives, list any important needs not covered in this questionnaire.

A better understanding between State and Local policy, the Principal, and the Teacher as to the curriculum for the kindergarten program was the most outstanding need. Funds to buy additional supplies which are not provided was a consideration.

Section 4 of Appendix G

# APPENDIX H

APPENDIX H

STANDARDS FOR KINDERGARTEN

SOUTHERN ASSOCIATION OF SCHOOLS AND COLLEGES

AREA E
Areas of Learning (ECK)

"Areas of Learning (ECK)" is a new area paralleling the preceding "Area E: Areas of Learning and Subject Areas." It applies only to early childhood center, kindergarten classes, and nursery classes.

PRINCIPLES: An effective early childhood program is broad in scope and provides for the wide range in rate, timing, and potential for learning that exists in young children. This is accomplished through balanced programs of activities that are planned for the development of concepts and skills through a curriculum in which the child is actively involved in his or her own learning.

Adequate programming for children under six takes into account fully that knowledge of human growth, development, and learning principles are vital. There principles include the following:

1. A child learns as a total person (emotionally, socially, physically, as well as intellectually).

2. Children grow through similar stages of development but at individual rates.

3. Children learn through their senses (hearing, seeing, touching, tasting, and smelling).

4. Children learn through active involvement (exploring, playing, manipulating, problem-solving).

5. Children learn through attitudes as well as through content. Therefore, attention should be given to methods, emotional climate, environment, and teacher-children interaction.

6. Children learn through play. Therefore, a sensitivity to the value of play is required; for it is through play that children create their own meaning and learning schemes. Play is the work of the children.

STANDARDS: The program shall provide a balanced day in the following broad areas:

1. Language Development -- The entire learning environment shall be designed to stimulate total language development. There shall be evidence that the staff has knowledge of how language develops and recognizes that the child must have basic learning processes developed to a certain level before formal reading and writing skills can be taught effectively and meaningfully. Success can be better insured by taking into account the developmental level of each child. Learning centers shall be available that provide for:

   a. oral language expression and listening skills development;

b. oral language recorded through the use of experience charts and stories;

c. vocabulary extension through discussion and verbalization of on-going activities;

d. reading to children daily;

e. informal exploration of picture books and other written materials by individuals and small groups of children;

f. visual and listening experiences through the use of such equipment as tape recorders, record players, and projectors. Children should be given opportunities to listen to their own recorded voices and to hear others produce meaningful recordings.

g. extension of language concepts and skills through informal teaching as opportunity arises in learning centers through play activities.

2. Physical Development -- Appropriate activities related to the child's physical development shall be included daily. Children's development patterns are different, and the need for rest and activity varies with the child. Physical abilities such as the control necessary to sit still or to stand in "ordered" fashion emerge at different times and are often relatively undeveloped in the child. The child learns health and safety habits through the adult models around him and through patient guidance. Learning centers shall be available that provide for:

a. opportunities to hop, to skip, to jump, to stretch, to balance, to climb, to catch, and to bend according to the child's individual development level;

b. imaginative exploration of movement such as pretending to be a rag doll or moving like different animals;

c. manipulation of blocks, wheel and push toys, puzzles, and other manipulatives to develop small muscle and eye-hand coordination;

d. opportunities to prepare and taste a wide variety of food and to discuss healthful eating habits;

e. opportunities to experience many dimensions of size and space;

f. outdoor as well as indoor exploration.

3. Social-Emotional Development -- There shall be evidence that the environment, including teachers and aides, is responsive to the children, that the activities fit the child's developmental level (are not too easy or too hard), and that the child is free from undue frustration. Social-emotional growth occurs most fully when children are able to engage in activities that give them competent feelings. Activities then must be realistic in terms of the child's development. The classroom environment and the learning activities shall:

a. indicate to the child that his abilities are acceptable;

b. reflect an attitude of respect and warmth toward each child;

c. provide for block-building, manipulatives, social living areas, and group participation so that children can work together and learn to share and cooperate with each other more effectively (Adult standards of "cooperation" often are inappropriate and unrealistic for children);

d. help each child recognize the needs of others;

e. assist each child to trust the environment and the adults within that environment.

4. Cognition. Problem-Solving, and Scientific Development -- There shall be opportunities daily for children to seek solutions to problems and situations that are real to them. If the child is "to know" rather than "to know about," problem-solving and scientific development must be a part of his life and must be on his "scale." Adult functioning levels are simply not possible for children, and they cannot be expected to think as adults think. Children below the age of six are perceptually bound in their cognitive development. They can come to know and believe only what they see and experience. When we understand the "child's" type of reasoning, we can see that his views are acceptable insofar as he has come to view the world. He cannot interpret as the adult who has more experience. Learning centers shall be available that provide:

a. opportunities for the child to compare and contrast, to see similarities and differences;

b. opportunities for the child to manipulate;

c. opportunities for the child to see;

d. opportunities for the child to hear;

e. opportunities for the child to taste, smell, and tough;

f. opportunities for the child to take apart, act on, and use diverse materials such as water, sand, earth, clay, puzzles, natural objects, and mechanical objects;

g. opportunities for the child to observe a variety of natural phenomena and observe and care for plants and animals.

5. Mathematical Development -- Provision shall be made to include mathematical activities that fit the child's level of development. Mathematics is the organization of experiences of time, space, and quantity into a systematic form. The child should become aware of his relationship to his environment and should be helped to organize and symbolize this experience. Activities introducing these concepts should be both planned and incidental, must involve the use of concrete materials and move toward abstraction, and must include problem-solving as it relates to the experience of the child. Learning centers shall be available that provide opportunities for:

a. exploration and manipulation of concrete objects;

b. counting activities in solving problems of interest to the child;

c. beginning recognition of numerals through various materials including puzzles, games, recipes, books, pictures, and manipulative cut-outs;

d. development of number concepts through experiences with quantity such as weighing and measuring, pouring liquids, stacking and building with blocks, and manipulating clay and other plastic materials;

e. awareness of time intervals and spatial relationships beginning with the child's own sense of the time and space close to himself, such as: planning the day, marking the calendar, recognizing special days and holidays, exploring the space around himself, mapping the classroom, and talking about over and under, up and down, far and near.

6. Creative Development -- Activities shall be provided that stimulate and enhance creative and imaginative development for each child in the program. Originality should be encouraged throughout the day. Creativity is the development of the ability to solve problems in a flexible and original way. In order to achieve this kind of thinking the child's natural curiosity should be encouraged and his imagination stimulated. He should be allowed a choice of media through which to express his feelings. The process of exploring should be presented as an exciting one. Mistakes should be accepted as a natural part of the exploration, and the child should be respected for his interest and his attempt as well as for his product. Learning centers shall be available that provide opportunities for:

a. observation of the environment;

b. exploration with a variety of visual art media;

c. development of the ability to distinguish between fantasy and reality;

d. appreciation of the artistic and the beautiful;

e. encouragement of imagination through play, verbalization, and artistic creation;

f. exploration of movement with and without music;

g. enjoyment of music through singing songs, listening, and musical games;

h. exploration of creative dramatics through story-telling, role-playing, puppetry, and doll-playing;

i. dictation of experience stories and recording of verbal experiences.

## AREA F
## School Staff, Administration, and Coordination

PRINCIPLE: Effective integration and coordination of all factors that contribute to the defined purposes of the school program, including functions of instruction, organization, administration, and finance, are essential to the achievement of quality education.

STANDARDS:

1. There shall be written board policies including a plan for periodic evaluation and revision.

2. Policies adopted by the local governing board shall be implemented by the superintendent and principals through appropriate administrative regulations.

3. There shall be written descriptions of the roles of professional and non-professional personnel.

4. There shall be an organized plan for communication among all persons within a school unit, among units within the school system, and agencies in the community.

# APPENDIX I

# The Meaning of Reading Readiness for Young Children

**Martin Haberman,** Dean
Division of Urban Outreach
University of Wisconsin System

What can a teacher, aide or parent look for to determine the readiness of a child to begin reading? Obsessive demands for the formal reading instruction of all preschool children lead teachers and parents to neglect the concept of readiness. Yet readiness may well be the single most critical principle of human development.

Readiness refers to at least four conditions: that the learner has the physical and psychological maturity to perform what is expected; that the learning is perceived as important; that prior learnings which may be prerequisite are already in hand; and finally, that the child perceives no risk of reprisal should he/she try and not succeed. The converse of readiness—to be "unready"—is equally critical: new learnings are perceived by the child as beyond him/herself unconnected to what is already known, valueless, or too dangerous to try.

It is clear that teachers cannot simply wait for maturation to bring about this readiness. Providing a wide range of experiences can nurture and elicit readiness. The critical issue for teachers, then, is not what experiences to provide—most early childhood educators are experts at enrichment activities—but how to decide whether the language experiences they do provide are really leading youngsters toward a genuine readiness for reading. It seems to me that there are five kinds of evidence which teachers might seek about each child in order to determine who might be ready to benefit from formal reading instruction.

1. Does the child recognize the content value of language and not simply its use as a medium of attack or defense against others? Many youngsters labeled "unready" or "disadvantaged" have never experienced this content insight which carries them beyond the use of language as merely exclamations and expletives. Language needs to be conceived of as more than lashing out "mine" or "no" before it can become a medium of communication.

2. Does the child perceive of language as a means of connecting with others? Many young children prefer playing and being alone, or at least remaining disconnected from others. Whether this is a temporary developmental stage or a personality attribute of particular individuals is not the issue. Until children actively seek group and individual contacts with other people, it is unlikely they will value the ideas transmitted by the spoken and written language of others.

3. Does the child use language as a means of sharing his/her ideas with others? The wide range of early childhood activities that facilitate sharing should make it readily apparent that some children have a felt need to express (and receive) ideas and feelings through language.

4. Does the child use language to express a felt need for more information or an elaboration of feelings? The child's recognition that language can help him/her to answer curiosities, interests, or the simple need for expression is a critical indicator of readiness.

5. Does the child demonstrate a capability for polishing, changing, improving his language? Since a critical first stage of reading instruction involves the child "copying" his own experience charts, this willingness and ability to polish—repeat and improve—his/her own expressions is a good predictor that he/she will subsequently be willing to reread or rewrite.

These kinds of evidence, carefully considered in relation to each child, will help early childhood educators to determine who is ready to benefit from reading instruction. The procedure of administering a standardized reading readiness test and then offering reading instruction to those who make a high enough score will only continue the present malpractice of pressuring some who are not ready and ignoring others (low scorers) who might be ready. Readiness is too important an issue to leave in the hands of test makers. Genuine readiness is an individualized determination that seeks to get at the child's basic understanding of language and its uses.

*Martin Haberman explains his theories, answers questions after film showing on testing.*

Source: Childhood Education/Branch Exchange, undated.

# APPENDIX J

APPENDIX J

READING AND PRE-FIRST GRADE

A Joint Statement of Concerns about Present Practices in Pre-First Grade Reading Instruction and Recommendations for Improvement.

Pre-first graders need...
opportunities to express orally, graphically, and dramatically their feelings and responses to experiences.

opportunities to interpret the language of others whether it is written, spoken, or non-verbal.

Teachers of pre-first graders need...
preparation which emphasizes developmentally appropriate language experiences for all pre-first graders, including those ready to read or already reading.

the combined efforts of professional organization, colleges, and universities to help them successfully meet the concerns outlined in this document.

CONCERNS:

1. A growing number of children are enrolled in pre-kindergarten and kindergarten classes in which highly structured pre-reading and reading programs are being used.

2. Decisions relating to schooling, including the teaching of reading, are increasingly being made on economic and political bases instead of on our knowledge of young children and how they best learn.

3. In a time of diminishing financial resources, schools often try to make "a good showing" on measures of achievement that may or may not be appropriate for the children involved. Such measures often dictate the content and goals of the programs.

4. In attempting to respond to pressures for high scores on widely-used measures of achievement, teachers of young children sometimes feel compelled to use materials, methods, and activities designed for older children. In so doing, they may impede the development of intellectual functions such as curiousity, critical thinking, and creative expression, and, at the same time, promote negative attitudes toward reading.

5. A need exists to provide alternative ways to teach and evaluate progress in pre-reading and reading skills.

6. Teachers of pre-first graders who are carrying out highly individualized programs without depending upon commercial readers and workbooks need help in articulating for themselves and the public what they are doing and why.

RECOMMENDATIONS:

1. Provide reading experiences as an integrated part of the broader communication process that includes listening, speaking, and writing. A language experience approach is an example of such integration.

2. Provide for a broad range of activities both in scope and in content. Include direct experiences that offer oppor-

tunities to communicate what they know and how they feel.

4. Continually appraise how various aspects of each child's total development affects his/her reading development.

5. Use evaluative procedures that are developmentally appropriate for the children being assessed and that reflect the goals and objectives of the instructional program.

6. Insure feelings of success for all children in order to help them see themselves as persons who can enjoy exploring language and learning to read.

7. Plan flexibly in order to accommodate a variety of learning styles and ways of thinking.

8. Respect the language the child brings to school, and use it as a base for language activities.

9. Plan activities that will cause children to become active participants in the learning process rather than passive recipients of knowledge.

10. Provide opportunities for children to experiment with language and simply to have fun with it.

11. Require that pre-service and in-service teachers of young children be prepared in the teaching of reading in a way that emphasizes reading as an integral part of the language arts as well as the total curriculum.

12. Encourage developmentally appropriate language learning opportunities in the home.

This statement was developed by

American Associates of Elementary/Kindergarten/ Nursery Educators

Association for Childhood Education International

Association for Supervision and Curriculum Development

International Reading Association

National Association of Elementary School Principals

National Association for the Education of Young Children

National Council of Teachers of English

Source: Young Children, Journal of the National Association for the Education of Young Children, September, 1977.

# APPENDIX K

APPENDIX K

## MANIPULATIVE MATERIALS IN EARLY CHILDHOOD EDUCATION

| Center | Materials | Examples of Potential Learning Experiences |
|---|---|---|
| Housekeeping Area | Basic equipment:<br>stove, refrigerator, sink, cupboard<br>doll bed, cradle, carriage<br>playscreen<br>Basic materials:<br>tea set<br>cook set<br>cutlery set<br>dolls<br>telephones<br>cash register<br>toy money<br>Supplementary materials:<br>doll hi-chair<br>ironing board and iron<br>housecleaning set<br>carpet sweeper<br>play foods<br>doll clothes<br>doll bathinette (plastic dishpan)<br>mirror<br>dress-up clothes with accessories for both boys and girls<br>doctor and nurse kits | Assuming responsibility for own actions<br>Expressing feelings in socially acceptable ways<br>Participating as a willing and sharing member of a group<br>Assuming a variety of roles in dramatic play<br>Anticipating his role of interdependence<br>Expanding vocabulary<br>Engaging in conversations<br>Responding to oral expressions of others |
| Block/Construction | Basic equipment:<br>unit blocks<br>hollow blocks with cart<br>Basic materials:<br>cars, trucks<br>tinkertoys<br>village blocks<br>Supplementary materials:<br>rig-a-jig<br>plastic bricks<br>large sponges<br>traffic signs | Engaging in dramatic play<br>Classifying by size and shape<br>Using words to express relationships<br>Comparing sizes<br>Using materials which promote eye-hand coordination<br>Conducting simple experiments<br>Assuming responsibility for own actions<br>Expressing feelings in socially acceptable ways<br>Participating as a willing and sharing member of a group<br>Solving problems independently<br>Expressing himself creatively<br>Expanding vocabulary |

| Center | Materials | Examples of Potential Learning Experiences |
|---|---|---|
| Library | Basic materials:<br>bookcase or table for displaying books<br>chairs or cushions<br>frequently changing collections of books | Browsing through many books for pleasure and information<br>"Reading" picture stories |
| Manipulatives/ Games | Basic materials:<br>assorted games<br>puzzles<br>parquetry blocks<br>magnetic boards with accessories<br>flannel boards with cut-outs<br>peg sets<br>manipulative toys | Using materials which promote eye-hand coordination<br>Expanding vocabulary<br>Recognizing, naming and describing objects<br>Discriminating among likenesses and differences<br>Using names for letter symbols<br>Carrying out directions<br>Engaging in conversations<br>Feeling wanted and accepted by peers<br>Working independently<br>Carrying a task to completion<br>Making choices and decisions |
| Woodworking | Basic equipment:<br>woodworking bench<br>Basic materials:<br>2 hammers<br>saw<br>screwdriver<br>pliers<br>assorted nails<br>assorted screws<br>scraps of lumber--soft wood | Using materials which promote eye-hand coordination<br>Using measuring tools<br>Enjoying successful experiences<br>Showing initiative in solving problems independently |
| Sand/Water | Basic materials:<br>plastic wading pool<br>collection of plastic containers of varying sizes and shapes<br>toy boats and cars<br>hose or plastic tubing<br>plastic dishpans and buckets<br>plastic or metal spoons, small shovels<br>sifters, sieves<br>large paint brushes | Comparing volume<br>Engaging in dramatic play<br>Expressing feelings in socially acceptable ways<br>Conducting simple experiments<br>Creating designs with fingers and hands |

| Center | Materials | Example of Potential Learning Experiences |
|---|---|---|
| Art | Basic materials:<br>paints, brushes<br>crayons<br>varied papers<br>clay<br>scissors<br>paste | Using varying media to express his ideas<br>Creating pictures and patterns with color<br>Using materials which promote eye-hand coordination<br>Interpreting events in his environment |
| Music | Basic Equipment:<br>phonograph<br>Basic materials:<br>records<br>rhythm instruments<br>Supplementary materials:<br>tape recorder<br>auto-harp | Identifying likenesses and differences in sounds and tones<br>Using music to express his ideas<br>Enjoying music as a medium of expression<br>Engaging in dramatic play<br>Enjoying rhythmic movement |