The Pasadena Unified School District, in northwest Los Angeles County, recognized that an early intervention program for economically disadvantaged children should be part of its comprehensive district revitalizing and restructuring plan. Consequently, staff developed the Kindergarten Program for Four-Year-Olds, which was designed to provide: (1) early intervention for at-risk children that focused on the entire family; (2) a differentiated 2-year kindergarten experience focusing on age-appropriate language development and use of computers to assist in language development; and (3) a socializing experience that could be extended beyond the third grade. The curricular framework of the program emphasizes active learning in using language; representing experiences and ideas; developing logical reasoning through classification, seriation, and number concepts; understanding time and space; using a computer; and participating in movement education, social and emotional development, literature, and ethnic and cultural recognition. Each child receives a hot lunch and a snack each day. The program features parent conferences, home visits, and parent education. No state funds support the program; funds needed to operate it have been obtained from private sources. Other program characteristics and aspects of implementation are reported. (RH)
KINDERGARTEN PROGRAM FOR FOUR-YEAR-OLDS: AN EARLY INTERVENTION STRATEGY

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This fall approximately 3,600,000 children entered kindergarten. Who are these 3,600,000 children? Twenty-five percent of these children live in poverty; for Blacks the figure is 50% and for Hispanics, 40 percent. Out of 80 million households, 9.5 million are headed by a single female parent, 16 percent of whom are under age 25, 50 percent unemployed, 42 percent living in the urban core. In California, one out of every six students in public schools was born in a country other than the United States. Every day in America, 40 teenage girls give birth to their third child.

This group of entering kindergartners will be expected to participate in a society far more complex than previous generations encountered. These students must have the necessary skills to compete in an increasingly technological job market. They must also have the civic and ethical values to keep our democracy alive and develop the character and judgment they need to live up to their potential. What kind of education is necessary during the crucial early years of a child’s life to prepare them for the twenty-first century?

The educational reform movement which has emerged since A Nation At Risk (1983) has focused largely on the high school and middle grades. The notion that educational reform begins at these levels does not recognize the fact what happens during a child’s first few years in school has a tremendous impact on the rest of that child’s schooling.

The impact of changing demographics and the consequences with respect to adolescent childbearing, proportion of working mothers, single parent families and international immigration suggest that a revitalization of early childhood education is necessary to meet the educational needs of this generation of students who will become the next generation of employees.

The seeds of failure are planted early. A student described at-risk is in danger of completing his or her education with an adequate level of skills. Risk factors include low achievement, retention in

grade, poor attendance, low socioeconomic status and attendance at schools with a large number of poor students. Each of these factors is closely associated with the dropout rate. Many educators feel that potential dropouts can be identified by the third grade. According to *A Children’s Defense Budget*, a report recently released by the Children’s Defense Fund (1988), conservative estimates suggest that as much as 30 percent of the school population is at-risk educationally. For every $1 spent today to prevent educational failure, society can save $6.00 in the cost of remedial education, welfare and crime later on. The price of corrective action may be low compared to the cost of inaction.

There is a common thread which winds its way through these immediate problems—poor academic performance in school, usually from the early elementary years on. Given this common thread, a scenario emerges. If schools could improve the academic performance of at-risk students beginning in the early years and continuing through the elementary years, this improvement would have multiple positive effects on student dropout, delinquency, pregnancy, substance abuse and other behaviors. Thus early improvement of poor academic performance could greatly alleviate multiple aspects of the overall problem.

Due to the necessity to look at the early primary program as a continuum, links must be developed between programs for four-year-olds and the early primary, primary and intermediate grades of elementary school (Honig, 1988).

Because of the current demographic, social and economic trends that characterize the United States, the provision of adequate public services for all children and youth is one of the nation’s most challenging and eminent priorities. Prekindergarten programs in public schools may be the most feasible and realistic alternative.

The social revolution which propels mothers of young children into the work force, is one of the major contributors to the deluge of task forces, committees and proposals to explore the issue of prekindergarten programs in public schools. Other sources, such as data from early intervention projects and the national education reform reports, offer additional contributions to the current flood of interest.
Evaluations of early intervention programs reveal significant correlations between disadvantaged children's participation in high quality preschool programs and their later success and employment records.

The notion of prevention is not a new one. Learning deficits easiest to remediate are those that never occur in the first place. Given the limited capacity of remedial programs to bring students up to an adequate level of performance, educators have shown increasing interest in strategies to provide intensive services in the early grades to reduce or eliminate the need for remedial services later on.

The reviews of preschool and kindergarten research note that the effects on the academic performance of at-risk students wash out in elementary school primarily due to lack of articulation between the curriculum of the preschool program and the curriculum of the elementary school program. To maintain the improved performance and continue to increase learning, elementary schools must provide instructional programs and organizational designs that are effective for at-risk students. The major findings suggest that the greatest long term increases for students may be in motivation. These changes were directly related to changes in the environmental support received by the students.

The Pasadena Unified School District, an urban-suburban school district in northwest Los Angeles County, recognized the need for an early intervention program for economically disadvantaged children as part of a comprehensive plan for revitalizing and restructuring the school district.

In May of 1988, a concept paper was presented by district staff to the Board of Education of the Pasadena Unified School District. This concept paper outlined a management plan designed to include elements of quality programs while at the same time to include new elements designed to overcome some of the short term effects on student participants. The management plan included the establishment of a Citizens Advisory Committee designed to represent a broad cross section of organizations and community interest groups. The function of the Citizens Advisory Committee was to review and provide feedback to staff technical committee reports on program design while at the same time to disseminate information to the groups they represented and the general community.

Another important aspect of the concept paper was the design of the program. The concept paper
outlined ten elements for program development and implementation. These elements were: goals, location, students served, staff, curriculum, classroom, staff training, support services, parenting, and evaluation.

The goals of the program, called the Kindergarten Program for Four Year Olds or "K4" for short, were 1) to provide an early intervention program for four year olds considered to be educationally "at-risk" that would focus on the entire family; 2) to provide a differentiated two-year kindergarten experience beginning with four year old children which focused on age appropriate language development experiences and utilization of computer technology to assist in that development; and 3) to provide a socializing experience for four year olds which could be extended beyond the third grade.

These goals are consistent with the goals of quality programs, however the exception lies in the extension of the concept to grades beyond the K4 experience. The lack of articulation between most quality programs and the regular school program in areas of curriculum and socialization may be one of the greatest limitations to preschool programs. In effect, the notion that this program is a preschool program, something separate from "regular school", was not considered. The very name of the program, the Kindergarten Program for Four Year Olds, implies that it is part of the regular school program. By design, this program will drive the revision of the existing program upward, not downward.

The Kindergarten Program for Four Year Olds is designed to provide an early intervention opportunity for students considered to be at-risk educationally. In the greater Pasadena community, approximately 1800 students enter public school kindergarten annually. In addition, approximately another 400 attend private or parochial school. Private school attendance in the greater Pasadena community is approximately twice the national average at 22 percent. Examination of census tract information and other demographic information indicated that approximately 1400 students live in families which fall below 20 percent of the state median income. Head Start and other similar programs with income requirements serving the community could accommodate approximately 800 children in this income category. The income criteria of 20 percent below the state median income
figure would also qualify these children for participation in the Federal School Lunch and Breakfast Program upon entry into the public schools. It was determined that since this was the greatest unserved group, priority for participation in the Kindergarten Program for Four Year Olds would be given to children using a sliding income criteria.

The location of the K^4 Program is on each regular elementary school campus. The decision to place the program on each elementary school campus reflects the notion that this program is part of the regular elementary school program of the Pasadena Unified School District. The limitations of most quality programs is the fact that they exist separate from the regular elementary school program and much of their success diminishes due to lack of articulation. A second reason why the program is on each elementary school campus is that it is the first year of a differentiated two-year kindergarten experience. A major factor considered in placing the program on a regular elementary campus was to begin the process of empowering parents with information necessary for successful schooling for their children by attempting to get the parents on the elementary campus a year earlier. It would seem unlikely that a program with this as a goal would be anywhere else but on a regular elementary school campus.

Staffing is critical to the success of any elementary school program. Work with young children has not been valued in the United States. According to the National Association of Young Children (NAEYC) "Fact Sheet" (1985) and the California State Department of Education Task Force on Early Childhood Education (1988) the average wage for all occupations in the United States is $19,358; teachers of prekindergarten and kindergarten received an average wage of $15,648 and the identified level of poverty was $10,610.

The salary statistics alone may indicate one of the limitations of early childhood education programs. Educational background and experience may be another. In an attempt to legitimize early childhood education as a profession, the planners of the K^4 Program placed teachers on the Pasadena Unified School District's existing salary schedule with the same benefits as regular classroom teachers. All teachers hired for this program are required meet the same certification requirements as regular elementary teachers.
All teachers presently teaching in this program have strong backgrounds and experience in language development, child growth and development and early childhood education. Teachers were hired both from within and outside of the Pasadena Unified School District. Teachers were hired for the program in June, 1988. The children arrived for the first day of participation in October 1988. This time difference was purposefully planned to allow the teachers who would be responsible for implementing the program to take part in the actual development of the curricular design.

Paraprofessionals were also hired for the program. A special category of paraprofessional authorized by California statute was utilized. The category of Teacher Assistant was utilized. The requirements for this position include university or college enrollment or the completion of a specialized university training program. This category of employee is compensated at a rate higher than a traditional education aide. Two Teacher Assistants are presently assigned to each teacher in the program. The addition of Teacher Assistants permitted a class size ratio of 15:2 in a two session per day program. Two of the Teacher Assistants have completed their course work and are now teaching in the Pasadena Unified School District.

The development of an age appropriate curriculum was a key issue in the design of this program. Much has been written in recent years about what is the most age appropriate curriculum for early childhood education programs. Some argue for pushing down the curriculum traditionally used for five year olds, others argue for building the curriculum upward.

A curriculum design planning committee composed of program teachers, district curriculum staff and elementary school principals worked during the summer of 1988 to design an instructional framework for this program. Two documents characterize the statement of philosophy which drives the framework. The position statement of the National Association for the Education of Young Children (NAEYC 1988) and the statement of appropriate practices found in the California State Department of Education Task Force Report (1988) strongly influence the curricular framework. The curriculum goals reflect that curriculum is designed to develop children's knowledge and skills in all developmental areas - physical, social, emotional and intellectual and to help children learn how to establish a foundation for lifelong learning. Curriculum and instruction are designed to develop
children's self-esteem, sense of competence and positive feelings toward learning.

Translated into key experiences the curricular framework emphasizes active learning; using language; representing experiences and ideas; developing logical reasoning through classification; seriation and number concepts; understanding time and space; movement education; social and emotional development; literature; ethnic and cultural recognition and using a computer.

The curricular design can be characterized by having a strong oral language development and socialization emphasis through active learning. The involvement of the classroom teachers was essential since they would have primary responsibility for implementation in their classrooms. Periodic reports were presented to the Citizens Steering Committee for feedback and dissemination to the greater community.

The utilization of computer technology is one of the innovative aspects of the curricular design of which characterize this program. Computer technology adds another multi-sensory experience to the curriculum. Three stations with color monitors and a color printer were established for the computer center in each classroom. Each station provides experiences using tactile, aural and visual modalities. The curriculum utilized assists with visual discrimination, fine muscle coordination and listening experiences. Age appropriate peripherals such as touch screen windows, Muppet keyboards and echo voice talking devices for the computers were purchased.

The curricular design utilized for this program is a bottom up driven design. Beginning with the implementation of this program in September 1988, a district-wide meeting of all teachers for the Kindergarten Program for Four Year Olds and traditional five year old kindergarten was conducted. The purpose of the meeting was to explain the purpose of the program, survey all traditional kindergarten program teachers for program improvements and begin to form committees for articulation and kindergarten program revision. To date, a draft of the revised kindergarten curriculum reflects an articulated two-year kindergarten program. It will be implemented in the fall of 1989. The drive upward with curriculum revision will continue during the 1989-1990 school year with grades 1 and 2 participating in the articulation and revision. This approach was placed in the program design as a means for overcoming the lack of long term effects of earlier
programs due to their isolation from the mainstream of public school curriculum.

Each elementary school with available space implemented the program during the Fall of 1988. Portable classrooms were moved to schools that did not have available space and the program began in the Spring of 1989. In all instances, the classrooms were entirely refurbished. Each classroom was equipped with manipulative materials, water tables, play furniture, multi-purpose store fronts, blocks, computers, furniture, art materials, audio-visual equipment, a refrigerator and outdoor play equipment. A teacher committee selected appropriate instructional materials and equipment for the instructional program.

Each classroom is organized with a configuration of centers and a large open area. The centers are designed for applications of active learning in art, science, rhythms, computers, block play, story telling, a store, a kitchen and other activities themed to the development of oral language skills and socialization skills. Additional curricular themes have been developed by program teachers in the areas of the care and use of animals in the program; songs, music, rhythms and chants; little books; literature; and language development activities.

Intensive staff training was conducted one month prior to student participation in the program. Each teacher received extensive training in the use of computers in the classroom, developmentally appropriate practices for four year old children and the instructional framework for the program. Visitations were conducted to observe other local exemplary preschool programs. Teachers also attended local and national conferences conducted by early childhood education professional associations.

Each Friday is a pupil-free day, which is consistent with the design and practices in quality programs. One Friday each month is utilized for staff training. Topics conducted were consistent with a needs assessment conducted with program teachers. The training included topics such as anti-bias in the curriculum, nutrition, CPR, parent training, a follow-up computer training session and referral procedures for community services. Paraprofessionals received the training along with their classroom teachers.

An examination of the success of other quality programs indicated that medical, psychological and
speech therapy services are an integral part of educating four year olds. A nurse, a school psychologist and a speech therapist were assigned to the program to provide health appraisals and a screening team approach and counseling plus provide the basis for a clearing house for community service referrals. These services are in addition to all regular services provided to students in the Pasadena Unified School District.

Nutrition is also an important part of the program. Each child participating in the program receives a hot lunch as well as a snack each day. The district nutritionist works closely with program teachers in designing the daily food service program.

Because the program focuses on the entire family of the four year old child, parent education and parent participation are essential components of the program. Recent research suggests that parent involvement has a favorable effect on general reasoning, school related knowledge and knowledge of verbal concepts. The program focuses on parents in three major areas: parent conferences, home visits and parent education. These activities are also conducted on Fridays as part of the pupil-free-day activities. A general parent orientation is conducted prior to the start of student participation. Some of the topics for parent education include those determined by the parents of each school others focus on nutrition, child growth and development activities, school related procedures and child abuse. The parent conferences are designed to provide parents with input as to the growth and development of their children as well as ways parents can be of assistance in the development of their children. The home visits are designed to bond the relationship between the parent, the child, the teacher and the school. The Quality Education Project has been adopted by the Pasadena Unified School District Board of Education and will be utilized at all schools beginning with the 1989-90 school year.

Full effects of the program may not fully be known for at least four to five years. In order to monitor the program on a short range and a longitudinal basis and evaluation design was constructed to include both quantitative and qualitative evaluation elements. Pepperdine University was contracted to conduct the evaluation of the program. The quantitative portion of the evaluation will focus on attendance rates, parent participation, health appraisal data, referrals and later student
achievement data. Qualitative techniques employed in the evaluation design include case studies, observations of teaching practices, child interaction, parent conferences, and surveys.

Preliminary quantitative data indicate that student attendance for the first semester for the 330 students participating in the program was 98 percent. This figure is almost 10 percent higher than attendance normally attributed for urban students. Attendance for the 570 students participating in the program by April of 1989 remained at the 98 percent figure. Enrollment for the 1989-90 school year has already reached capacity. During its first year of operation, the program showed a 93% stability rate. Data from records of parent conferences, home visits and parent education classes also indicate a high degree of congruence to program goals.

Probably the most unique feature of the Kindergarten Program for Four Year Olds is the method of funding the program. The Pasadena Unified School District, like all other school districts in the state of California, receives state support for ADA based on student enrollment and attendance beginning at age 5. Presently no state funds are supporting this program. The $1.4 million necessary to operate this program comes from private sources.

John and Dorothy Shea and Richard and Jill Riordan, two couples who are active with numerous charitable causes in Los Angeles County, pledged large contributions during the summer of 1988 to the program and have been instrumental in obtaining other donations. John Shea, owner of a building contractor and land development firm and Richard Riordan, an attorney, have assisted the Pasadena Unified School District senior staff in arranging meetings with potential donors.

Other sources have supported the program through contributions. Major donors include the Weingart Foundation, Milken Family Foundation, ARCO Foundation, Fritz B. Burns Foundation, WWW Foundation, Raymond and Gertrude Marshall Charitable Lead Annuity Trust, Patron Saints Foundation, Mead Foundation, the Lyon Development Corporation, Bank of America, Wells Fargo Bank and the Security Pacific Corporation.

A preschool experience can generate future savings for states. The New York Commission estimated that preschools can generate a savings of $10,000 per child on remediation and $50,000 per child during a lifetime (Tugend 1986). The Achievement Council concludes that well-designed
studies now make it clear that high quality preschool programs lasting one year and targeted to four- year olds from poor families can have enormous economic payoffs, small differences in performance in the early years of schooling accumulate over a student's early life to produce dramatic differences in performance as young adults. An articulated two year program in the public schools on a regular elementary school campus, taught by regular elementary school teachers under the supervision of regular elementary school principals may produce more striking results.

Bibliography


