DOCUMENT RESUME

ED 329 585 TM 016 220

AUTHOR Rachal, Janella; Abshire, Barbara
TITLE State-Funded Program for High-Risk Four-Year-Olds, 1989-90 Evaluation Report.
INSTITUTION Louisiana State Dept. of Education, Baton Rouge. Office of Research and Development.
PUB DATE Jul 90
NOTE 99p.
PUB TYPE Statistical Data (110) -- Reports - Evaluative/Feasibility (142) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS *Educationally Disadvantaged; *High Risk Students; Preschool Children; Preschool Education; *Preschool Evaluation; *Program Evaluation; Remedial Programs; School Districts; School Readiness; *State Programs; State Surveys
IDENTIFIERS *Louisiana; *State Funded Program High Risk Four Year Olds LA

ABSTRACT

The Louisiana State-Funded Program for High-Risk Four-Year-Olds (SPHF) works to improve the readiness of preschool children eligible to enter kindergarten the following year who are at risk of being insufficiently prepared. This interim report qualitatively and quantitatively evaluates the implementation and effectiveness of the SPHF. Sixty-two (94%) of the state's 66 local school systems took part in the program, employing 83 teachers to instruct 1,653 high-risk 4-year-old students in 85 classes, most (90%) of which were full-day programs. These students represented 5.9% of the group considered at-risk. Participants were more often black than white, and were from families with incomes of $15,000 or less. All systems used pretest/posttest results to measure student progress. Local systems most frequently reported their major strengths to be program quality and staff quality. The major weakness was late or insufficient funding. Of all program graduates in kindergarten through grade 4, 81% were on grade level in terms of their progression through school. Although the SPHF reaches its target population, current funding levels severely limit the number of children served and the potential impact of program services on the entire at-risk population. A greater adherence to Department of Education criteria that are effective program correlates should facilitate the attainment of model program status among all participating systems. The SPHF has had a positive effect on the preparation of participants for entering the regular school program. An appendix contains the project description survey; other appendices contain information about a follow-up study and the regulations for the program. One figure illustrates the numbers and percent of high-risk 4-year-olds served, and 16 tables present study data. (SLD)

TM

BUREAU OF EVALUATION AND ANALYTICAL SERVICES

EVALUATION REPORT

1989-90 State-Funded Program for High-Risk Four-Year-Olds

July 1990

Bureau of Evaluation and Analytical Services
Office of Research and Development

Louisiana Department of Education
Post Office Box 94064
Baton Rouge, Louisiana 70804-9064

LOUISIANA DEPARTMENT OF EDUCATION

This public document was published at a total cost of $523.73; 200 copies of this public document were published in this first printing at a cost of $523.73. The total cost of all printings of this document, including reprints, is $523.73. This document was published by the Louisiana Department of Education, P.O. Box 94064, Baton Rouge, Louisiana 70804-9064, to report information about the State-Funded Program for High-Risk Four-Year-Olds under authority of Louisiana R.S. 17:24.7. This material was printed in accordance with the standards for printing by state agencies established pursuant to R.S. 43:31.

EVALUATION REPORT
1989-90 STATE-FUNDED PROGRAM FOR HIGH-RISK FOUR-YEAR-OLDS

PREPARED BY

Janella Rachal
Barbara Abshire
Bureau of Evaluation and Analytical Services
Office of Research and Development
Louisiana Department of Education

SUBMITTED TO

William A. Davis, Director
Bureau of Elementary Education

TABLE OF CONTENTS

	Page
LIST OF TABLES	iii
LIST OF FIGURES	iv
EXECUTIVE SUMMARY	v
CHAPTER	
1. INTRODUCTION	1
Background	1
Purpose of the Evaluation	3
Evaluation Questions	4
Evaluation Audiences	6
2. METHODOLOGY	7
Data Sources	7
Evaluation Procedures	8
Description of the Instruments	9
Data Analysis Procedures	11
3. PRESENTATION OF THE DATA AND DISCUSSION OF THE RESULTS	12
Introduction	12
Evaluation Question 1: What are the characteristics of the 1989-90 State-Funded Program for High-Risk Four-Year-Olds?	12
Participation Level	12
Class Type and Enrollment	13
Program Staffing	15
Selection of Participants	17
Family Background	21
Program Description	24
Parental Involvement	28
Transportation	28
Program Assessment	31
Evaluation Question 2: What is the per pupil expenditure in local programs?	33
Number of Projects Implemented	33
Per Pupil Expenditures	34
Evaluation Question 3: What has been the longitudinal impact of the State-Funded Program for High-Risk Four-Year-Olds on "graduates" now enrolled in kindergarten through fourth grade?	36

Table of Contents (cont'd)

	Page
Background	36
Grade Level Progression	37
Mean Performance Ratings	41
Rating Percentages at Each Level by Developmental Area	45
Evaluation Question 4: To what extent has the program met the needs of the total population of high-risk four-year-olds in Louisiana?	50
Eligibility Projections	50
Eligibility to Service Ratio	53
4. FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS	55
Findings	55
Conclusions	63
Recommendations	65
APPENDIX	
Louisiana Department of Education 1989-90 State-Funded Program for High-Risk Four-Year-Olds Project Description Survey	69
Louisiana Department of Education 1989-90 State-Funded Program for High-Risk Four-Year-Olds Follow-Up Study of Former Program Participants	74
Regulations for State-Funded Programs for High-Risk Four-Year-Olds	76

LIST OF TABLES

Table		Page
1.	High-Risk Four-Year-Old Class Enrollment by Length of Class Day	14
2.	Staffing of State-Funded Programs for High-Risk Four-Year-Olds	16
3.	Selection of Students for Participation in State-Funded Programs for High-Risk Four-Year-Olds	18
4.	Effectiveness Ratings of Screening Instruments Used for Selection of High-Risk Four-Year-Old Participants	20
5.	Family Background of Program Participants	22
6.	Methods Used by Teachers to Assess Student Progress and Effectiveness of Pre-test/Post-test Instrument	25
7.	Skills Checklists Used by Participating Systems	26
8.	Ratings of Pre-test/Post-test Instruments Used by Participating Systems	27
9.	State-Funded Program for High-Risk Four-Year-Olds Parental Involvement Activities	29
10.	Transportation of High-Risk Four-Year-Old Project Participants	30
11.	Program Strengths and Weaknesses	32
12.	Program Expenditures	35
13.	Current Grade Placement of Former Program Participants	38
14.	Mean Ratings of the Current Performance of Former Participants in Comparison With That of Their Nonparticipant Peers	42
15.	Percentages of Program Graduates Receiving Performance Ratings at Each Level in the Seven Developmental Areas Assessed	46
16.	Projections of the Total Number of High-Risk Four-Year-Olds Potentially Eligible for Participation in the 1989-90 State-Funded Program for High-Risk Four-Year-Olds	51

LIST OF FIGURES

Figure | Page

1. Number and Percent of High-Risk Four-Year-Olds Served During the 1989-90 School Year 54

EVALUATION REPORT
1989-90 STATE-FUNDED PROGRAM FOR HIGH-RISK FOUR-YEAR-OLDS

EXECUTIVE SUMMARY

Act 323 (R.S. 17:24.7) of the 1985 Legislature authorized annual funding of early childhood development projects for all school systems beginning with the 1985-86 school year. A total of $1,501,500 was appropriated from this source in 1989-90, with an additional $1,595,000 being allocated through the Louisiana Quality Education Support Fund (8g) to expand the existing program through the development of model programs in participating systems. Thus $3,096,500 was available for 1989-90, providing up to four projects per school system according to a formula based on school system enrollment. The purpose of the State-Funded Program for High-Risk Four-Year-Olds is to improve the readiness of preschool-aged children who are eligible to enter kindergarten the following year, and who are at risk of being insufficiently ready for the regular school program.

In addition to individual project evaluations required by statute, the Bureau of Elementary Education requested that the Bureau of Evaluation and Analytical Services conduct an overall evaluation of the implementation and effectiveness of the 1989-90 program. This interim report was prepared in response to that request. A final report will be completed in October 1990.

Sixty-two of the state's 66 local school systems (94%) participated in the 1989-90 State-Funded Program for High-Risk Four-Year-Olds, employing 83 teachers to provide instruction to 1653 high-risk four-year-olds in 85 classes. Over 90% of these classes were full-day classes. Project participants were selected on the basis of age, screening results, family income level, and parental commitment.

Program participants were more often found to be black than white, with all coming from families with incomes of $15,000 or less. The principal wage earners were most frequently reported to be either unemployed or unskilled laborers. Approximately one third of the participating children lived in intact family settings.

Approximately half of the program teachers held nursery school certification, with more than one-third being kindergarten-certified. Teacher aides were used in all classes.

Parents were most often involved in local programs through attendance at scheduled meetings or workshops and the provision of assistance with special activities.

Over half of the participating systems transported program students in both directions, but the lack of such transportation did not prohibit the majority of students from attending classes.

All of the 62 participating systems used pre-test/post-test results to measure student progress.

Local systems most frequently reported their major program strengths to be in the quality of the program itself, as well as in the staff providing the classroom instruction. The weakness most often reported was late and/or insufficient funding.

Among the 62 participating systems, 46 implemented single high-risk four-year-old projects, 12 implemented two projects each, 1 system implemented three projects, and 3 implemented four projects. Per pupil expenditures for full-day classes ranged from $1458 to $2661, while those among half-day classes were in the $735 to $1024 range. The per student contact hour expenditures ranged from $1.35 to $2.46 for full-day classes, while half-day classes varied from $1.36 to $1.90.

Department of Education Regulations implemented in 1989-90 focused on such validated correlates of effective programs as participant eligibility, teacher qualifications, allowable screening instruments, and class size parameters. Participating systems were observed to adhere to these requirements with few exceptions.

Among all program graduates enrolled in kindergarten through fourth grade, 81% were found to be on grade level in terms of their progression through school. When compared with their present peers, between 54% and 94% of these graduates were rated by their present teachers as on line with, or slightly above class average, in each of the seven developmental areas addressed by the program.

Of the 81,393 four-year-olds in Louisiana in 1989, an estimated 28,162 (34.6%) were considered to be at risk. Of that number of high-risk four-year-olds, 5.9% were being served by the State-Funded Program for High-Risk Four-Year-Olds, 26.8% were being served by Head Start, 14.3% were served by Chapter 1 and 8% were served by the Special Education Preschool Handicapped Program. Overall, while 55.3% of the high-risk four-year-olds were being served through the combination of sources, 44.7% (12,599) remained at risk of being insufficiently ready for the regular school program.

CONCLUSIONS

The conclusions reached as a result of this study include the following:

- The State-Funded Program for High-Risk Four-Year-Olds is reaching its targeted population, but the current funding level severely limits both the number of such children who can be served and the potential impact of program services on the at-risk population as a whole.

  Rationale: During 1989-90 the State-Funded Program served 1653 of the 28,162 high-risk four-year-olds in Louisiana (5.9%). Through the combination of both state and federal sources, 55.3% of the at-risk four-year-old population received services, but 44.7% remain unserved.

- The continued implementation of the Department of Education Regulations in 1989-90 has resulted in greater adherence to those criteria previously identified as effective program correlates and should facilitate the attainment of model program status among all participating systems.

  Rationale: The increased specificity associated with participant eligibility, teacher qualifications, screening instruments, and class size has resulted in the implementation of a greater number and broader range of proven practices and procedures among all participating systems.

- As evidenced by the grade level progression and subsequent classroom performance of program graduates, the State-Funded Program for High-Risk Four-Year-Olds has had a positive effect on the preparation of participants for the regular school program.

  Rationale: Longitudinal data indicate that 81% of the students who participated in the program were on line with their peers in terms of their current grade-level enrollment. When compared with their present peers in each of the seven developmental areas addressed by the program, between 54% and 94% of the program graduates were assessed to be at least on line with their peers in terms of their classroom performance in each of these seven areas.

RECOMMENDATIONS

The following recommendations are offered on the basis of this evaluation of the 1989-90 State-Funded Program for High-Risk Four-Year-Olds:

- In view of the limited number of high-risk four-year-olds that could be served by the 1989-90 program, it is recommended that funds for program expansion be sought through all available federal, state, and local sources. The redirection of monies

provided through Chapters 1 and 2, along with the continued availability of 8(g) funds for exemplary early childhood programs, should substantially increase the pool of funds available for serving at-risk children.

- In order to maximize the potential effectiveness of all local, state, and federal early childhood education programs in operation in Louisiana, it is recommended that a state-level task force be created to develop a state plan for ensuring the coordinated, consistent identification of eligible children and the provision of developmentally-appropriate services to these children. Such a plan would improve cost-effectiveness and eliminate potential service duplication, thereby increasing the total number of at-risk children who could be served through all available sources.

- The Department of Education Regulations introduced in 1988-89 should be continued to ensure compliance with the validated correlates of program effectiveness delineated within those regulations.

- Due to the number and variety of pre-test/post-test instruments in use in local systems, consideration should be given to narrowing the list of appropriate instruments and providing guidance to each system in the selection and use of those instruments.

- Longitudinal studies of former program participants should be continued in order to assess the sustained effects of the program on the subsequent classroom performance of program graduates. In order to facilitate this, as well as other longitudinal studies, it is strongly recommended that a student identification and information system be implemented statewide so that the impact of all monies directed toward education can be more accurately measured.

INTRODUCTION

Background

During the 1984 Legislative Session, funds were provided through Act 619 to establish 10 early childhood pilot projects for the 1984-85 school year. School systems were invited to compete for program funds through submission of proposals to the Department of Education. Ten grants of $30,000 each were awarded. Results of the first year pilot projects were reported in the Interim Evaluation Report: 1984-85 Early Childhood Development Projects and the Interim Evaluation Report: 1985-86 Early Childhood Development Program prepared by the Bureau of Evaluation in April 1985 and April 1986, respectively.

Act 323 (R.S. 17:24.7) of the 1985 Legislature extended the initial pilot effort by authorizing annual funding of early childhood projects beginning with the 1985-86 school year. Approximately $2.1 million was appropriated for 1985-86. All systems were eligible to apply for funding for up to four projects each, in accordance with a formula established by Act 323 based on school system enrollment. Thirty-seven of the state's 66 local school systems participated during the 1985-86 school year, implementing a total of 50 early childhood classes.

Funding for the 1986-87 program was authorized by the 1986 Legislature in the amount of $1.8 million (after budget reductions). All systems were eligible to apply for funds in accordance with total

student enrollment levels. Fifty systems elected to participate during 1986-87, implementing a total of 71 classes statewide.

For the 1987-88 school year, budgetary constraints caused the program to be limited to ongoing programs, with no new proposals being accepted. Consequently, program participation was limited to the 50 systems that had offered early childhood classes in 1986-87. A total of $1.7 million was made available for the continuation of these projects during the 1987-88 school year.

For 1988-89, the State Board of Elementary and Secondary Education, in support of the Governor's Education Reform Package, allocated funds to the Department of Education through the Louisiana Quality Education Support Fund 8(g) to expand the existing effort through the initiation of model programs for potential implementation in the 16 systems that had not previously participated. Funding for the newly termed 1988-89 State-Funded Program for High-Risk Four-Year-Olds was, therefore, from two sources: the state appropriation, in the amount of $1.5 million, plus $1.4 million in 8(g) funds. A total of $2.9 million was made available for the implementation of classes for at-risk four-year-olds in the 62 systems that elected to participate.

For 1989-90, the State-Funded Program for High-Risk Four-Year-Olds was again funded by both 8(g) and state funds. The Quality Education Support Fund 8(g) provided $1,595,000 in funds to support model programs, with the remaining $1,501,500 provided by state appropriation for ongoing programs. A total of $3,096,500 was thus made available for projects in the 62 systems participating in the program.

The purpose of the program for high-risk four-year-olds is to improve the readiness of preschool-aged children. The target population includes children who are eligible to enter kindergarten the following year and who are at risk of being insufficiently ready for the regular school program.

Among other requirements related to implementation of the program for high-risk four-year-olds, Act 323 directs each participating school system to provide the Department of Education with a "thorough written review of the project including documentation of how the money awarded...was spent, its results, and the recommendations of the school system with regard to the project...." In addition to these individual project evaluations required by statute, the Department's Bureau of Evaluation and Analytical Services has been asked by the Bureau of Elementary Education (which is responsible for the administration of the State-Funded Program for High-Risk Four-Year-Olds) to continue its overall evaluation of the implementation and effectiveness of the program. This report represents the results of the study of the 1989-90 program conducted in response to that request; a final report will be prepared during the fall of 1990.

Purpose of the Evaluation

The purpose of this evaluation of the State-Funded Program for High-Risk Four-Year-Olds is to provide information to decision makers at the state and local levels to assist them in making judgements about the extent to which the intended goals for early childhood education in the public schools have been attained, and about

potential modifications needed relative to the operation and administration of the program. The evaluation also supplements local project evaluations, thus providing the administrators of individual projects with information for use in decision-making about continuing, modifying, or developing projects for at-risk four-year-olds.

Evaluation Questions

The 1989-90 evaluation of the State-Funded Program for High-Risk Four-Year-Olds focuses on several major themes:

- An examination of the demographics associated with program participation and implementation
- A determination of the per pupil expenditure in local programs
- An analysis of the longitudinal impact of program participation on former participants now in kindergarten through fourth grade
- An indication of the extent to which the program has met the needs of the total population of at-risk four-year-olds in Louisiana

As in previous years, the evaluation is conducted in two segments. This report is prepared for presentation to the State Superintendent of Education, the House and Senate Education Committees, and the State Board of Elementary and Secondary Education (BESE) in July 1990. This report will be followed by a comprehensive longitudinal report to be prepared for presentation to the State Superintendent of Education, the Louisiana House and Senate, and

the State Board of Elementary Secondary Education in October 1990. The evaluation questions to be addressed by each component include the following:

1989-90 Program Report: July 1990

1. What are the characteristics of the 1989-90 State-Funded Program for High-Risk Four-Year-Olds in terms of:

   a. Participation level
   b. Class type and enrollment levels
   c. Program staffing
   d. Selection of participants
   e. Family background
   f. Program description
   g. Parental involvement
   h. Transportation
   i. Program assessment

2. What is the per pupil expenditure in local programs?

3. What has been the longitudinal impact of the State-Funded Program for High-Risk Four-Year-Olds on "graduates" now enrolled in kindergarten through fourth grade?

4. To what extent has the program met the needs of the total population of at-risk four-year-olds in Louisiana?

Comprehensive Longitudinal Report: October 1990

1. What instructional techniques and methodologies are in use in local programs for high-risk four-year-olds and to what extent do these reflect the developmental philosophy inherent in early childhood education?

2. How do the classroom observation results compare with those obtained in previous years in terms of the extent to which local programs reflect the developmental philosophy inherent in early childhood education?

3. What is the impact of the program on the performance of program "graduates" as assessed by the Louisiana Educational Assessment Program at grades three and four?

Evaluation Audiences

The following are the major audiences for the evaluation and are considered legitimate recipients of evaluation reports:

- The State Superintendent of Education and his Cabinet
- The State Board of Elementary and Secondary Education
- Members of the House and Senate Education Committees
- The State Department of Education Office of Academic Programs and Bureau of Elementary Education
- Administrators of individual State-Funded Programs for High-Risk Four-Year-Olds

METHODOLOGY

Data Sources

The evaluation of the 1989-90 State-Funded Program for High-Risk Four-Year-Olds is largely descriptive in nature. Both qualitative and quantitative data were collected to address the process and product-oriented evaluation questions. The specific data sources fo. the study are listed below. Copies of the instruments used in the conduct of the study can be found in the Appendix.

- Individual project proposals
- Regulations for State-Funded Programs for High-Risk Four-Year Olds
- State-Funded Program for High-Risk Four-Year-Olds Evaluation Reports (1984-1989)
- Louisiana Department of Education 1989-90 State-Funded Program for High-Risk Four-Year-Olds Project Description Survey
- Louisiana Department of Education 1989-90 State-Funded Program for High-Risk Four-Year-Olds Follow-Up Study of Former Program Participants
- Board of Regents' report on Louisiana birth history from 1960 through 1986
- The 1988 Sourcebook of Demographics and Buying Power for Every County in the USA by CACI, Inc.

Evaluation Procedures

The evaluation of the 1989-90 State Funded Program for High-Risk Four-Year-Olds began in October 1989 with the development of the data collection instruments by the Bureau of Evaluation and Analytical Services in consultation with the Bureau of Elementary Education. The Project Description Survey, the Follow-Up Study of Former Program Participants, and accompanying cover memo were mailed to all project directors on December 4, 1989. The requested return date for the Project Description Survey to be completed by project directors was December 19, 1990. The follow-up forms were to be forwarded to the 1989-90 kindergarten, first grade, second grade, third grade, and fourth grade teachers of former high-risk four-year-old program participants. The return date for these forms was January 29, 1990. Data obtained from both forms are included in this report.

In order to determine the total number of four-year-olds in Louisiana, and more specifically the percentage of this total considered to be at risk, several data sources were consulted. Ultimately, the figure reflecting the total number of four-year-olds was drawn from a report by the Board of Regents on Louisiana birth history from 1960 through 1986. The specific demographic information needed in order to compute the number of such children considered to be at risk was obtained from The 1988 Sourcebook of Demographics and Buying Power for Every County in the USA by CACI, Inc. Both sources are discussed in more detail in the next section.

Description of the Instruments

The local program data used in the conduct of this study were primarily drawn from two instruments: the Louisiana Department of Education 1989-90 State-Funded Program for High-Risk Four-Year-Olds Project Description Survey and the Louisiana Department of Education 1989-90 State-Funded Program for High-Risk Four-Year-Olds Follow-Up Study of Former Program Participants. The Project Description Survey was developed specifically for this study by the Bureau of Evaluation and Analytical Services with the Bureau of Elementary Education. The Follow-Up Study Instrument was adapted from an instrument developed by Anderson and Bower (1985) for an evaluation of an early childhood education program for handicapped children in Louisiana.

The Project Description Survey is a multi-page instrument addressing the following areas: program location, enrollment, and staffing; participant selection criteria; family background of participants; instructional program description; parental involvement; participant transportation; and assessment of program strengths and weaknesses. The instrument was designed to be completed by each local project director relative to all classes for high-risk four-year-olds being conducted under the auspices of the state program.

The Follow-Up Study Instrument was adapted from the Statewide Evaluation of Early Education Programs for Handicapped Children in Louisiana: 1985-86 - Questionnaire/Interview, Kindergarten Teachers, Anderson and Bower (1985). The instrument identifies the seven areas basic to early childhood education and requests that the kindergarten, first, second, third and fourth grade teachers currently working with

program graduates assess the performance of these students in comparison with that of their present classmates. The teachers were also asked to provide information on student retention, student absences, parental involvement, and/or student participation in developmental or transition classes.

The Board of Regents' report on Louisiana birth history from 1960 through 1986 provides birthrate information by parish and state for that time period. Correlations between birthyear and academic class group are also included, along with birthrates by race. Through the use of the birth data for 1985, an estimation of the total number of four-year-olds in the state during 1989 was made.

The 1988 Sourcebook of Demographics and Buying Power for Every County in the USA by CACI, Inc., provides an annual update of census information in three main areas: total population, demographic composition, and income distribution. Income profiles are provided by county and state in terms of the percentage of family incomes under $10,000, as well as those within the following ranges: $10,000-$14,999, $15,000-$24,999, $25,000-$34,999, $35,000-$49,999, $50,000-$74,999, and above $75,000. Since changes in income available to households relate closely to the local industrial and economic base, CACI tracks local growth and decline of industry as related to income levels through economic base projections of the National Planning Association (NPA). NPA utilizes historic data on income by industry from the United States Bureau of Economic Analysis. CACI's income projections apply the NPA projected rate of change in per capita income to household family income data from the 1980 census, hence incorporating the potentially substantial local effects of a changing industrial base.

Data Analysis Procedures

The data compiled from the Project Description Survey relative to each local project are largely descriptive in nature and are generally reported as such in this report. For those items where quantitative information was obtained, frequencies and percentages are reported as appropriate.

The Follow-Up Study Instrument data are quantitative and are compiled in the form of frequencies and means for each of the seven developmental areas addressed. These results are reported by grade level in accordance with the current kindergarten through fourth grade enrollment of program graduates.

The birthrate data for 1985 obtained from the Board of Regents' report on Louisiana birth history from 1960 through 1986 were used to project the total number of four-year-olds in Louisiana during the 1989-90 school year. This number was then correlated with data from The 1988 Sourcebook of Demographics for Every County in the USA to compute numbers and total percentages of high-risk four-year-olds theoretically in the state during 1989-90.

PRESENTATION OF THE DATA AND DISCUSSION OF THE RESULTS

Introduction

The data collected for this interim evaluation of the 1989-90 State-Funded Program for High-Risk Four-Year-Olds are organized with respect to the four major evaluation questions addressed in the study.

Evaluation Question 1: What are the characteristics of the 1989-90 State-Funded Program for High-Risk Four-Year-Olds?

Participation Level

During the 1989-90 school year 62 local school systems (94%) provided classes for at-risk four-year-olds. Four school systems elected not to participate. Of the 62 participating systems, 3 had 4 classes each, 1 had 3 classes, 12 had 2 classes each, and 46 had 1 class each. During the 1989-90 school year these 85 classes served 1653 children statewide.

The State-Funded Program for High-Risk Four-Year-Olds has been in existence in Louisiana for six years. Of the 62 systems which participated in the program, 12 (19%) were presently in their second year of operation, 12 others (19%) were in their fourth year of program participation, 29 (47%) were in their fifth year of involvement, and 9 (15%) had sixth year programs. Since no new programs were funded during 1987-88, no third year programs were in operation.

Class Type and Enrollment

During 1988-89, specific regulations were adopted defining the length of the school day and delineating class size limitations. Assurances of adherence to these regulations, as well as all other program regulations, were submitted by all participating systems as part of the application and approval process. These regulations continued to be in effect during 1989-90.

Class size regulations define a full-day class as 330 minutes of teacher-directed/child-initiated activities, while a half-day class is specified as consisting of 165 minutes of such activities. Allowable class size/adult ratios are specified as being 10 to 12 students with one teacher and no aide, 13 to 15 students with one teacher and a half-time aide, and/or 16 to 20 students with both a teacher and full-time aide.

Data concerning 1989-90 class type and enrollment level in accordance with the length of the class day are shown in Table 1. As illustrated in the table, 85 classes serving 1653 high-risk four-year-olds were implemented across the state during 1989-90. Of the 85 classes, 77 (91%) were full-day classes, and 8 (9%) were operated on a half-day basis.

Class size among the full-day classes ranged from 15 to 20 students.[1] The mean class size of the full-day classes was 18 students, while the number most frequently enrolled in such classes was 20. The 1502 students enrolled in full-day classes represented 91% of the total number of program participants.

[1] Since all classes have a full time aide, classes with less than 16 students are in violation of state regulations. These classes originally had enrollments of 16 students but had lost one student by reporting time.

Table 1. High-Risk Four-Year-Old Class Enrollment
by Length of Class Day
N=1653

	Full Day			Half Day		
Class Size	Number of Classes	Percentage of Classes	Total Number of Students	Number of Classes	Percentage of Classes	Total Number of Students
15	1	1	15	1	13	15
16	1	1	16	0	0	0
17	3	4	51	0	0	0
18	4	5	72	2	25	36
19	12	16	228	0	0	0
20	56	73	1120	5	62	100
Total	77	100	1502	8	100	151

Enrollment in the half-day classes ranged from 15 to 20 students. The mean class size was 18, with 20 being the most frequent number of students per class. The total number of students enrolled in these half-day classes was 151, reflecting 9% of the total number of program participants.

Program Staffing

Information concerning the staffing of the State-Funded Program for High-Risk Four-Year-Olds is shown in Table 2. As illustrated in Part I of the table, of the 83 teachers working in the program, 39 (47%) had nursery school certification, while 32 (39%) were certified to teach kindergarten, but not nursery school. Six teachers (7%) who were not certified as per state regulations were encompassed under Circular 665, while 6 (7%) had temporary certificates. (Circular 665 allows systems to employ as teachers persons who have a college degree but have not passed the National Teacher Examination.)

Information concerning teacher aides employed in the State-Funded Program for High-Risk Four-Year-Olds is shown in Part II of Table 2. As illustrated, full-time aides were employed in all (100%) of the 85 high-risk four-year-old classes.

Table 2. Staffing of State-Funded Programs for High-Risk Four-Year-Olds

I. Teacher Certification (N=83)[a]	Number of Teachers	Percentage
A. Nursery school (may include other areas)	39	47
B. Kindergarten, but not nursery school	32	39
C. Employed under special conditions		
1. Circular 665	6	7
2. Temporary certificate	6	7

II. Classes With Teacher Aides (N=85)	Number of Aides	Percentage
A. Full-time aides	85	100

[a]Some teachers conduct two half-day classes.

Selection of Participants

As specified in the Regulations for State-Funded Programs for High-Risk Four-Year-Olds, participant eligibility is to be based on the following:

> Projects shall serve children who are:
>
> 1. One (1) year younger than the age required for kindergarten;
> 2. At-risk of being insufficiently ready for the regular school program based on screening results;
> 3. From families with annual incomes under $15,000;
> 4. From families who agree to participate in various activities associated with the program.

The frequency with which participating systems employed these mandated criteria, as well as other optional criteria often used in the identification of at-risk children, is shown in Table 3.

As illustrated in the table, three of the four criteria mandated for use in the identification of potential high-risk four-year-old participants (screening results, student age specifications, and parental commitment) were employed by all 62 systems. The fourth mandated criterion (from families with annual incomes under $15,000) was met by 61 of the 62 systems. In order to meet the class size requirement for program eligibility the remaining system received authorization from the State Department of Education to use $17,000 as its maximum allowable income level for one student. Parent interviews were used as criteria by 33 systems (53%), with free lunch eligibility being used by 26 (42%). Chapter I eligibility was considered by 20

Table 3. Selection of Students for Participation in State-Funded Programs for High-Risk Four-Year-Olds and Applicant/Service Ratio

I. Selection Criteria (N=62)	Number of Systems	Percentage
A. One year younger than kindergarten age	62	100
B. Identified as at-risk on screening results	62	100
C. From families who agree to participate	62	100
D. From families with annual incomes under $15,000	61	98
E. Parent interviews	36	58
F. Chapter 1 eligible family	21	34
G. Head Start waiting list	10	16
H. Free lunch eligibility	26	42
I. Other	1	2

	Number of Applicants	Number of Participants	Percentage of Applicants Served
II. Applicant/Service Ratio	3772	1653	44

Note. Systems reported that 1210 applicants who were screened and reported to be eligible could not be served.

systems (32%), with Head Start waiting lists consulted by 10 systems (16%). Six systems (10%) indicated that other criteria were used in the identification process.

Data presented in Part II of Table 3 illustrate that 3772 four-year-olds applied for participation in the 1989-90 State-Funded High-Risk Four-Year-Old Program. Based on the participant total of 1653 children, these data indicate that the program served 44% of the total number who applied.

As specified within the regulations governing the program, five screening instruments have been authorized for use in the identification of eligible participants. Information concerning the frequency with which the five allowable screening instruments were employed by local school systems in the determination of participant eligibility, along with the associated satisfaction ratings for each, is illustrated in Table 4. In order of decreasing frequency of use, these instruments were the Brigance Pre-School Screen for Three and Four-Year-Old Children, Developmental Indicators for the Assessment of Learning (DIAL-R), the Denver Developmental Screening Test, the Battelle Developmental Inventory, and the Early Recognition Intervention System.

The Brigance Screen was the instrument most frequently administered by the systems (30 of the 62 systems or 48%). Thirteen of the 30 systems (43%) rated it as very effective, while 14 (47%) rated it as effective. One system (3%) gave the Brigance an ineffective rating, while 2 systems (7%) using the Brigance did not provide ratings.

Table 4. Effectiveness Ratings of Screening Instruments Used for Selection of High-Risk Four-Year-Old Participants (N=62)

Screening Instrument	Effectiveness Rating: Very Effective N	%	Effective N	%	Ineffective N	%	No Rating Provided N	%	Total Systems N	%
I. Brigance Pre-School Screen for Three and Four-Year-Old Children	13	43	14	47	1	3	2	7	30	48
II. Developmental Indicators for the Assessment of Learning (DIAL-R)	7	59	4	33	0	0	1	8	12	19
III. Denver Developmental Screening Test	4	36	5	46	1	9	1	9	11	18
IV. Battelle Developmental Inventory	3	38	4	50	0	0	1	12	8	13
V. Early Recognition Intervention System	2	67	1	33	0	0	0	0	3	5
VI. Combination, Including Other	6	100	0	0	0	0	0	0	6	10
VII. Other, Not on Approved List	0	0	1	100	0	0	0	0	1	2

Note. Some systems used more than one screening instrument.

Developmental Indicators for the Assessment of Learning (DIAL-R) was used by 12 systems (19%). Very effective ratings were indicated by 7 systems (59%), while effective ratings were assigned by 4 systems (33%). One system (8%) did not assign a rating for this instrument. The next most frequently used instrument was the Denver Developmental Screening Test (by 11 systems, or 18%). Of these systems, 4 (36%) rated the instrument as very effective, 5 (46%) rated it as effective, and 1 (9%) rated it as ineffective.

Very effective ratings were reported by three systems (38%), while effective ratings were reported by four (50%) of the eight systems (13%) using the Battelle Inventory. No rating was provided by one system. The Early Recognition Intervention System was used by three systems (5%). Two systems (67%) rated this instrument as very effective, while one system (33%) rated it as effective. The six systems which used a combination of instruments rated them as very effective. One system used an instrument that was not on the approved list and rated it as effective.[2]

Family Background

Information concerning the family background of program participants is illustrated in Table 5. Among the 1653 students enrolled in the program, 1167 (71%) were black, 468 (28%) were white, 13 (1%) were Hispanic, 4 (less than 1%) were Asian, and 1 (less than 1%) was of another race. No native American students were enrolled in the program.

[2]The system reporting "Combination, including Other," used at least one of the five allowable instruments in combination with at least one other instrument not on the list. The system that used "Other" (an instrument not on the approved list) was in violation of program regulations. Since detection of this violation by the Department of Education came after children had already been screened, this discrepancy could not be rectified relative to the 1989-90 program.

Table 5. Family Background of Program Participants
(N=1653)

Family Background of Participants	Number of Students	Percentage
I. Racial Composition		
A. Black	1167	71
B. White	468	28
C. Hispanic	13	1
D. Asian	4	1
E. Other	1	1
F. Native American	0	0
II. Family Income Level		
A. Under $10,000	1086	66
B. $10,000 - $14,999	531	32
C. $0 to $14,999	35	2
D. $15,000 to $17,000	1	1
III. Employment of Principal Wage Earner		
A. Unemployed	686	41
B. Unskilled laborer	641	39
C. Skilled laborer	231	14
D. Professional/technical	46	3
E. Managerial/administrative	35	2
F. Not reported	14	1
IV. Students Living in Intact Family	561	34

Note. Two students whose parents meet the income qualifications now reside in foster homes.

The most frequently reported family income range among the 1653 participants was in the "under $10,000" range (66%, or 1086 families). Thirty-two percent of the participating families (531) have incomes in the $10,000 - $14,9999 range. Two children whose parents met the income qualifications now reside in foster homes.

Two systems did not break down the income level but reported that the 35 children (2%) served had annual family incomes below $15,000. One of these systems was given permission by the Department of Education to extend eligibility to one child with a family income under $17,000 in order to meet the class size requirement for program eligibility.

The family income levels reported in Table 5 reflect the ranges as provided by participating school systems. Since program regulations specify a family income level under $15,000 as an eligibility criterion, the student level data relative to actual participants were carefully reviewed early in the actual screening process.

Among the program participants, the principal wage earner in the family was most often found to be unemployed (686 or 41%). This was followed in frequency by 641 families in which the principal wage earners were reported as unskilled laborers (39%). Skilled laborers were next in relative frequency (231 families or 14%). The principal wage earners in 46 participating families (3%) were employed in professional/technical fields, while 35 (2%) held managerial/administrative positions. (Data were not reported for 14 families or 1%). Of the program participants, 561 or 34% were reported to be living in intact family settings (with both parents).

Program Description

Information concerning the assessment of student progress is shown in Table 6. As illustrated in Part I of the table, the school systems used several methods of assessing student progress. All 62 systems (100%) administered pre-test/post-test instruments, while teacher observations were reported to be used by 59 systems (95%). Parent-teacher conferences were used by 57 systems (92%), with local/ teacher-developed skills checklist being used by 32 systems (52%). In 25 systems (40%) commercially-developed skills checklists were used. Other approaches were used by 6 systems (10%).

As illustrated in Part II of the table, 30 systems (48%) ranked their pre-test/post-test instrument as very effective, while 27 systems (44%) reported their instrument as effective. Ineffective ratings were given by 3 systems (5%), while two systems (3%) did not rank their pre-test/post-test instrument.

Of the 25 systems that used a commercially-developed skills checklist, 13 different instruments were identified as being used. As illustrated in Table 7, the Santa Clara Developmental Tasks Instrument was reported as being employed in 6 (24%). DLM-Beginning Milestones was used by 4 systems (16%), while 3 systems (12%) used the Brigance Preschool Screening Instrument. Dial R was used by 2 systems (8%). Two systems (8%) used the instrument from the Center for Applied Research. Each of the other 8 instruments was used by only 1 system (4%).

All of the 62 participating school systems administered pre-test/ post-test instruments. Overall, 17 different instruments were being used. The effectiveness ratings of these instruments as reported by the systems using each is shown in Table 8.

Table 6. Methods Used by Teachers to Assess Student Progress and Effectiveness of Pre-test/Post-test Instruments Employed (N=62)

I. Methods Used to Assess Progress[a]	Number of Systems	Percentage
A. Administration of pre-test/post-test instrument(s)	62	100
B. Teacher observations of student progress	59	95
C. Parent/teacher conferences	57	92
D. Local/teacher-developed skills checklists	32	52
E. Commercially-developed skills checklists	25	40
F. Other approaches	6	10

II. Effectiveness of Pre-Test/Post-Test Instrument	Number of Systems	Percentage
A. Very effective	30	48
B. Effective	27	44
C. Ineffective	3	5
D. Very ineffective	0	0
E. No rating	2	3
	62	100

[a] Since more than one method could be in use by each system, the percentages will total in excess of 100%.

Table 7. Commercially-Developed Skills Checklists Used by Participating Systems
(N=25)

Commercially-Developed Skills Checklists Used	Number of Systems	Percentage
Santa Clara Developmental Tasks	6	24
DLM - Beginning Milestones	4	16
Brigance Preschool Screen	3	12
Dial R	2	8
The Center for Applied Research	2	8
Preschool Checklist by Maxim	1	4
Brittannica Early Childhood Progress Report	1	4
Alpha Time	1	4
Total	1	4
Peabody	1	4
Developmental Inventory of Learned Skills	1	4
Kindergarten Keys	1	4
Chicago Early Childhood Inventory	1	4

Table 8. Ratings of Pre-test/Post-test Instruments Used by Participating Systems (N=62)

	Name of Instrument	Effectiveness Rating: Very Effective N	%	Effective N	%	Ineffective N	E	No Rating Provided N	%	Total Systems N	%
I.	Learning Accomplishment Profile (LAP)	8	50	7	44	1	6	0	0	16	26
II.	PST	4	57	3	43	0	0	0	0	7	11
III.	Bracken Basic Concept Scale	3	50	2	33	1	17	0	0	6	10
IV.	Brigance	2	50	2	50	0	0	0	0	4	6
V.	Santa Clara	3	75	1	25	0	0	0	0	4	6
VI.	Dial R	2	50	1	25	0	0	1	25	4	6
VII.	Boehm	1	33	2	67	0	0	0	0	4	6
VIII.	Battelle	1	33	2	67	0	0	0	0	3	5
IX.	Peabody	2	100	0	0	0	0	0	0	2	3
X.	Preschool Screening	2	100	0	0	0	0	0	0	2	3
XI.	CTB	0	0	2	100	0	0	0	0	2	3
XII.	Cognitive Skills Assessment	1	50	1	50	0	0	0	0	2	3
XIII.	Chicago	1	50	1	50	0	0	0	0	2	3
XIV.	Comprehensive Assessment Program	0	0	1	100	0	0	0	0	1	2
XV.	Denver	0	0	1	100	0	0	0	0	1	2
XVI.	KIDS	0	0	0	0	1	100	0	0	1	2
XVII.	American Testronics	0	0	1	100	0	0	0	0	1	2
XVIII.	Not Given	0	0	0	0	0	0	1	100	1	2

As illustrated, the Learning Accomplishment Profile was used by 16 systems (26%). This program was rated as very effective by 8 systems (50%), effective by 7, (44%), and ineffective by 1 system (6%). The PST used by 7 systems (11%) received a very effective rating by 4 systems (57%) and an effective rating by 3 systems (43%). The Bracken Basic Concept Scale was used by 6 systems (10%) and was reported as very effective by 3 systems (50%), effective by 2 systems (33%), and ineffective by 1 system (17%). Other pre-test/post-test instruments used by participating systems, as well as the effectiveness rating of each are also illustrated in the table.

Parental Involvement

All of the 62 participating school systems (100%) reported that they involved parents in their programs. The types of parental involvement employed in the State-Funded Program for High-Risk Four-Year-Olds are described in Table 9. As illustrated, the most frequently reported activity was parent attendance at meetings and workshops (57 systems or 92%). Parental involvement in the form of helping with parties and bringing snacks was reported by 56 systems (90%). The next most frequently reported activity was helping with field trips (53 systems or 85%). Other activities in which parents were involved to a lesser degree are also shown in Table 9.

Transportation

Information concerning the transporting of four-year-old participants is presented in Table 10. Among the 62 participating in systems, 37 (60%) provide student transportation in both directions.

Table 9. State-Funded Program for High-Risk Four-Year-Olds
Parental Involvement Activities
(N=62)

Parental Involvement Activities	Number of Syste s	Percentage
Attending meetings and workshops	57	92
Helping with parties	56	90
Bringing snacks	56	90
Helping with field trips	53	85
Reading stories to the children	34	55
Making materials	32	52
Helping with art projects	31	50
Helping on the playground	22	35
Taking children to the library	17	27
Helping in some other way	17	27
Helping in the cafeteria	16	26

Table 10. Transportation of High-Risk Four-Year-Old Project Participants (N=62)

Transportation of Participants	Number of Systems	Percentage
I. How Students Are Transported (N=62)		
A. System provides in both directions	37	60
B. Parents provide all transportation	12	19
C. System provides to children within school zone or route	11	18
D. System provides in one direction to children within school zone	2	3
	62	100
II. Extent to Which Transportation Limits Accessibility of Program (N=25)		
A. Majority are able to participate	20	80
B. Program is inaccessible to those most in need	2	8
C. About half are able to participate	1	4
D. Fewer than half are able to participate	1	4
E. No response	1	4
	25	100

In 12 systems (19%) parents were responsible for transporting their children in both directions. No reimbursement was provided in such instances. Eleven systems (18%) provided all transportation to those participating children served by an established route. Two systems (3%) provided transportation in one direction to students within the school zone or route.

As illustrated in Part II of Table 10, 20 of the 25 systems (80%) that did not provide two-way transportation for participants reported that the majority of their students were still able to attend classes. Two systems (8%) reported that the program was inaccessible to those most in need. One system (4%) reported that about half were able to participate, while one (4%) indicated that fewer than half were able to participate. One system (4%) did not respond to the question.

Program Assessment

The major strengths and weaknesses of the State-Funded Program for High-Risk Four-Year-Olds, as reported by the 62 participating systems, are listed in Table 11. As illustrated in the table, program quality, especially that related to the developmental aspects of the program, was the most frequently reported strength (60 systems or 97%). The next most frequently reported strength was the quality of teachers and aides (59 systems or 95%). Fifty-five systems (89%) listed early identification of, and assistance provided to, at-risk students as a strength, while 54 systems (87%) cited support from the community, administration, and faculty as a strength. Parental involvement and participation was reported as a strength by 44 systems (71%). Ten systems (16%) listed other strengths such as central

Table 11. Program Strengths and Weaknesses
(N=62)

Strengths and Weaknesses	Number of Systems	Percentage
I. Identified Program Strengths		
A. Program quality, especially developmental aspects	60	97
B. Quality of teachers and aides	59	95
C. Early identification of, and assistance provided to, at-risk students	55	89
D. Support from community, administration, and faculty	54	87
E. Parental involvement and participation	44	71
F. Other	10	16
II. Identified Program Weaknesses		
A. Limitations associated with late and/or insufficient funding	32	52
B. Limited parental involvement in instructional areas	30	48
C. Limited parental participation in terms of numbers involved	27	44
D. Limited facilities or equipment	21	34
E. Other	8	13
F. Individually-identified weaknesses in specified developmental areas	7	11
G. Limited administrative support	3	5
H. Lack of properly certified teachers	1	2

office support, facilities, school readiness of students, the inservice program, nutritional meals, and health and medical services.

The most frequently reported program weakness was the limitation imposed by late and/or sufficient funding (32 systems or 52%). Limited parental involvement in instructional areas was reported as a weakness by 30 systems (48%). Limited parental participation in terms of the numbers involved was reported as a weakness by 27 systems (44%), while 21 systems (34%) cited limited facilities or equipment as a weakness. Other weaknesses that were reported include individually-identified weaknesses in specified developmental areas (7 systems or 11%) limited administrative support (3 systems or 5%); and lack of properly certified teachers (1 system or 2%). Eight systems (13%) reported other weaknesses such as the income criteria cuts off too many children, the staff development program should include training in what is developmentally appropriate for high-risk four-year-olds, and the services should provide for speech therapy and health needs.

Evaluation Question 2: What is the per pupil expenditure in local programs?

Number of Projects Implemented

Funding for high-risk four-year-olds during 1989-90 was allocated on the basis of total school system enrollment. Systems with previous year enrollments of 19,999 or fewer students were eligible for one project each, while those with 20,000 to 39,999 students were eligible for two projects. Enrollment levels between 40,000 and 59,999 students qualified systems for three projects; four projects could be

awarded in systems with a student population equal to or in excess of 60,000 students. The amount of money systems received per project varied from $29,167.06 to $47,865.06 (depending upon the amount allotted by the systems for teacher salaries).

Information concerning the number of classes awarded to participating school systems, as well as the actual per pupil expenditures associated with those classes, is shown in Table 12. As illustrated, among the 62 participating systems, 46 (74%) offered a single class each, 12 (19%) offered 2 classes each, 1 (2%) offered 3, and 3 (5%) offered 4.

Per Pupil Expenditures

The per pupil expenditures for projects within the State-Funded Program for High-Risk Four-Year-Olds varied in accordance with the types of classes offered and the student enrollment level in each class. As illustrated in Table 12, of the full-day classes, the student enrollment levels ranged from 15 through 20 students per class. The allotted per class funding level ranged from $29,167.06 to $47,865.06 in accordance with the amount allotted for teacher salaries. (Teacher salaries vary from system to system according to local salary schedules, the degree held by a teacher, and the number of years of teaching experience.) The per pupil expenditure for these full-day classes ranged from a minimum of $1458.35 per student (in a class of 20 funded at $29,167.06) to a maximum of $2661.21 (for a class of 15 funded at $39,918.18). Within the eight half-day classes funded at levels ranging from $14,699.70 to $17,647.93, student enrollment levels varied from 15 to 20 students. The per

Table 12. Program Expenditures
(N=62)

	Number of Systems	Percentage
I. Number of Classes Implemented		
A. One	46	74
B. Two	12	19
C. Three	1	2
D. Four	3	5
Total classes	62	100

II. Per Pupil Expenditure Range	Minimum Expenditure	Maximum Expenditure
A. Full-day classes (15-20 students)	$ 1458.35	$ 2661.21
B. Half-day classes (15-20 students)	$ 734.99	$ 1024.40

III. Expenditure Per Student Contact-Hour		
A. Full-day classes (1080 hours per year)	$ 1.35	$ 2.46
B. Half-day classes (540 hours per year)	$ 1.36	$ 1.90

pupil expenditures ranged from $734.99 (for a class of 20 funded at $14,699.70) to $1024.40 (for a class of 15 funded at $15,366.03).

A more specific breakdown of per pupil expenditures can be computed on the basis of the number of hours of program services or of student-teacher contact provided. Half-day programs are defined here as providing an average of three hours of student-teacher contact per school day, while full-day programs are those involving six such contact-hours. The school year is defined as 180 days.

Based on these parameters, the average per pupil expenditure per contact-hour in full-day programs ranged from $1.35 (for a class of 20 students) to $2.46 (for a class of 15). Among half-day programs the comparable expenditure range was $1.36 (for a class of 20 students) through $1.90 (for a class of 15 students). Although this is a simplification, the statistic does provide a gross measure of per pupil expenditures for comparative purposes.

Evaluation Question 3: What has been the longitudinal impact of the State-Funded Program for High-Risk Four-Year-Olds on "graduates" now enrolled in kindergarten through fourth grade?

Background

The State-Funded Program for High-Risk Four-Year-Olds was begun in 1984-85 with the implementation of 10 pilot classes serving a total of 315 students. Since that time, these and subsequent program graduates have continued their grade level progression through school with varying degrees of success. While initial 1984-85 participants

could have reached fourth grade during the 1989-90 school year, students enrolled in the 1988-89 program could have progressed to kindergarten.

Since the second program year, follow-up studies of program graduates have been conducted as part of the state evaluation of the longitudinal impact of pre-school early childhood education on subsequent school performance. Longitudinal information is presented for all five groups of former participants involved in the program since its initial year of operation (1984-85).

Eligibility for participation in the four-year-old program assumes the presence of developmental deficiencies among potential candidates. Once identified as "at risk of being insufficiently ready for the regular school program," it is expected that without intervention, these students will be less well-developed socially, physically, and intellectually than other children their own age.

Grade Level Progression

One aspect of the longitudinal study of former high-risk four-year-old program participants focuses on the actual progression of such students through the regular school program. Those in the initial 1984-85 group, subsequently assessed to be on level with their peers, would have progressed to fourth grade by 1989-90. The 1985-86 graduates could have advanced to third grade, and the 1986-87 group could have been in second grade. Participants in the 1987-88 could have been in first grade, while those in the 1988-89 group could have been in kindergarten. The actual placement of such students for the 1989-90 school year is shown in Table 13.

Table 13. Current Grade Placement of Former Program Participants
(N=3383)

Year of Program Participation	Maximum Expected Level	Actual Grade Placement for 1989-90																	
		Pre-K		K		K/1 Transition		Grade 1		1/2 Transition		Grade 2		Grade 3		Grade 4		Students on Grade Level	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
84-85 (N=125)	4	-	-	-	-	-	-			-	-	9	7.2	45	36.0	71	56.8	71	56.8
85-86 (N=508)	3	-	-	-	-	-	-	32	6.3	-	-	144	28.3	332	65.4	-	-	332	65.4
86-87 (N=764)	2	-	-	3	0.4	3	0.4	213	27.9	6	0.8	539	70.6	-	-	-	-	539	70.6
87-88 (N=805)	1	1	0.1	128	15.9	23	2.9	639	79.4	14	1.7	-	-	-	-	-	-	653	81.1
88-89 (N=1181)	K	40	3.4	1130	95.7	11	0.9	-	-	-	-	-	-	-	-	-	-	1141	96.6
Total (N=3383)	-	41	1.2	1261	37.3	37	1.1	884	26.1	20	0.6	692	20.5	377	11.1	71	2.1	2736	80.9

51

As illustrated in the table, complete placement data were obtained for 3383 students. This represents 61.1% of the total number of students (5541) who participated in the program since its inception. Due to the absence of a statewide student identification and/or information system, the retrieval of longitudinal data of this type relies on data collection mechanisms at the local level. Transfers across LEA and/or state boundaries compound the difficulty of obtaining longitudinal information. As a result, the return rate for students who had been enrolled during the initial program year (1984-85) was 39.6%, while that relative to 1985-86 graduates was 45.7%. For enrollees in the 1986-87 program, the return rate was 60.0%, while for students initially enrolled in 1987-88, the rate was 66.6%. Among 1988-89 participants a 73.2% rate was observed.

The highest grade level to which the 315 students enrolled in the program in 1984-85 could have progressed was fourth grade. Data relative to these students indicate that 71 (56.8%) of the 125 for whom information was received were enrolled in fourth grade. However, 45 (36.0%) of the students in that 1984-85 group were enrolled in third grade, with the remaining 9 students (7.2%) being in second grade in 1989-90. Overall, these data indicate that 56.8% of the 1984-85 program graduates for whom information was available (71 of the 125), had progressed to their maximum expected grade level (fourth grade), while the remaining 43.2% were currently one to two years below that level.

Grade level data received with respect to 508 of the 1112 children who were in the 1985-86 program indicate that 332 of these former program participants (65.4%) were at their maximum expected

third grade level, while 144 students (28.3%) were in second grade. Thirty-two of these students (6.3%) were in first grade. Overall, 65.4% of the 1985-86 students were on grade level, while the remaining 34.6% were below grade level.

For the 1272 students who were in the 1986-87 class, longitudinal data received relative to 764 of these indicate that 539 (70.6%) were enrolled at the maximum expected second grade level during the 1989-90 school year. Six of these students (0.8%) were in transitional first grade (1/2) classes while 213 (27.9%) were in first grade. Three students in this group were reported to be in transitional kindergarten and 3 were in kindergarten. Overall, 70.6% of the 1986-87 program participants were on grade level, with the remainder below grade level.

Longitudinal data received for 805 of the 1228 students who participated in the program during the 1987-88 indicate that 639 (79.4%) of these students were currently at the maximum expected first grade level, and 14 (1.7%) were in transitional first grade classes (1/2). Of the remaining students, 23 (2.9%) were in transitional kindergarten classes, while 128 (15.9%) were in kindergarten. One student was reported to be in pre-kindergarten. Thus, 81.1% of these 1987-88 program graduates (653) were on grade level, with 18.9% being below grade level.

Data received for 1181 of the 1614 participants of the 1988-89 program indicate that 1130 (95.7%) were at the maximum expected kindergarten level, while 11 (0.9%) were in transitional kindergarten (K/1) classes. The remaining 40 students (3.4%) were in pre-kindergarten classes. Overall, 1141 (96.6%) of the 1988-89 program graduates were on grade level.

Aggregation of the overall grade level progression data for the former early childhood program participants for whom such information was received indicates that, taken as a composite group, 80.9% of these students were assessed as being on line with their peers in terms of their grade-level placement. Correspondingly, the remaining 19.1% were somewhat below their peers in terms of the maximum grade level to which they could have advanced by the 1989-90 school year.

Mean Performance Ratings

A second aspect of the longitudinal study of former high-risk four-year-old program participants focuses on the classroom performance of these students compared with that of their 1989-90 kindergarten through fourth grade peers. As part of the Follow-Up Study information relative to each program graduate, teachers currently working with former program participants were asked to rate the performance of these students in comparison with that of the other children in their respective classes who had not been involved in the program. The seven developmental areas assessed in the rating included cognitive development, degree of independence, social development, receptive communication, expressive communication, fine motor development, and gross motor development. Numerical values specified for use in assessing student performance in each of these areas ranged from 1.0 to 4.0, with the 1.0 value representing the most positive rating of "above class average" and the 4.0 value representing the most negative assessment of "unsatisfactory." The results of this assessment are presented by developmental area and current grade placement in Table 14.

Table 14. Mean Ratings of the Current Performance of Former Participants in Comparison With That of Their Nonparticipant Peers

Rating Scale: 1.0 = above class average
2.0 = on line with class average
3.0 = slightly below class average
4.0 = unsatisfactory

Grade Level	Cognitive Development		Degree of Independence		Social Development		Receptive Communication		Expressive Communication		Fine Motor Development		Gross Motor Development	
	N	Rating	N	Rating	N	Rating	N	Rating	N	Rating	N	Rating	N	Rating
Pre-K	41	2.3	41	2.1	41	2.3	41	2.2	41	2.2	41	2.3	41	2.0
K	1250	2.2	1251	2.1	1251	2.2	1244	2.1	1251	2.2	1250	2.2	1251	1.9
K/1	31	2.0	31	1.9	31	1.9	31	1.9	31	1.9	31	1.9	31	1.7
First Grade	882	2.1	885	2.1	885	2.1	885	2.1	882	2.1	884	2.0	887	1.9
1/2	20	2.4	20	2.3	20	2.4	20	2.4	20	2.4	20	2.2	20	2.2
Second Grade	687	2.0	690	2.0	690	2.1	689	2.0	688	2.1	690	1.9	691	1.9
Third Grade	372	1.9	373	1.9	373	1.9	372	1.9	372	2.0	372	1.8	373	1.8
Fourth Grade	68	1.8	68	1.9	68	2.0	68	1.9	68	2.0	68	1.8	67	1.8

As illustrated in the table, former high-risk four-year-old program participants enrolled in pre-kindergarten attained mean ratings between 2.3 and 2.0 across the seven developmental areas addressed by the scale. These students were reported to be on line with class average in one area (gross motor development) and between the "on line" and "slightly below class average" categories in the other six areas assessed. However, the mean ratings in these six areas were closer to the "on line with class average" category than to the "slightly below class average" designation.

Kindergarten students who were former program participants received mean ratings ranging from 2.2 through 1.9. These students were reported to be between on line with class average and sightly below class average in six of the seven developmental areas. Ratings indicating performance a bit above class average (mean=1.9) were reported in one area (gross motor development).

Mean ratings assigned to students placed in transitional kindergarten (K/1) ranged from 2.0 through 1.7. The performance of this group of students was thus assessed to be on line with class average in one area and between on line with class average and above class average in the other six areas. The 1.9 and 1.7 mean scores in these six areas indicate performance more closely to being on line with class average than to being above class average.

First grade students received mean ratings ranging from 2.1 to 1.9. These students were reported to be between slightly below class average and on line with class average in five areas and on line with class average in one area (fine motor development). A rating of very slightly above class average was reported in one developmental area (gross motor development).

Ratings reported for transitional first grade students (1/2) ranged from 2.4 to 2.2. As illustrated in the table, these students were reported to be between on line with class average and slightly below class average in all areas, though closer to the former category than to the latter.

Ratings assigned to second grade students who had previously participated in the high-risk four-year-old program ranged from 2.1 to 1.9. These students were assessed to be between on line with class average and slightly below class average in two of the developmental areas. Second grade students were on line with class average in three areas. In the other two areas the scores were reported to be between on line with class average and above class average.

Former participants who reached third grade this school year received mean ratings ranging from 2.0 to 1.8. Ratings for third graders located through the survey were reported to be on line with class average in one area and between on line with class average and above class average in the other six developmental areas addressed.

Ratings reported for fourth grade students ranged from 2.0 to 1.8. These students were assessed to be on line with class average in two areas and between on line with class average and slightly above class average in the other five.

Viewing the mean scores of the students in each group across all seven developmental areas reveals that, of former program participants currently enrolled in pre-kindergarten through first grade, the gross motor development area was the area in which these students were most positively rated (2.0, 1.9, 1.7 and 1.9, respectively). Students in transitional first grade, second grade, and third grade had equally

high ratings in both fine motor development and gross motor development (2.2, 1.9, and 1.8, respectively). The areas of cognitive development, fine motor development and gross motor development received the most positive ratings (1.8) for students who had reached fourth grade. Thus, students at all grade levels received at least one of their highest ratings in the area of gross motor development.

Rating Percentages at Each Level by Developmental Area

Information concerning the percentages of former high-risk four-year-old program participants who received ratings at each of the designated levels (1.0 through 4.0) with respect to the seven developmental areas is presented in Table 15. As illustrated, these percentages are broken out according to the 1989-90 grade placement of program graduates.

Of former program participants currently enrolled in pre-kindergarten, between 53.7% and 90.2% were assessed to be on line or above class average in each of the seven developmental areas examined. The gross motor skills area was that in which the greatest percentage of these students (90.2%) were most highly rated, while the area of fine motor development was that in which the greatest number (46.3%) received ratings slightly below class average or unsatisfactory.

Between 69.6% and 89.1% of kindergarten students were rated as on line with or above class average in each of the seven areas when compared with their peers. The area in which the greatest percentage

Table 15. Percentages of Program Graduates Rated at Each Level Across the Seven Developmental Areas Assessed

Current Grade Placement	Percentages of Graduates Rated at Each Level[a]					
	Above class average	On line with class average	Total on line or above	Slightly below class average	Unsatisfactory	Total below or unsatisfactory
Pre-K						
Cognitive development (N=41)	14.6	46.3	60.9	29.3	9.8	39.1
Degree of independence (N=41)	14.6	61.0	75.6	19.5	4.9	24.4
Social development (N=41)	12.2	51.2	63.4	29.3	7.3	36.6
Receptive communication (N=41)	12.2	61.0	73.2	22.0	4.9	26.9
Expressive communication (N=41)	12.2	58.5	70.7	26.8	2.4	29.2
Fine motor (N=41)	19.5	34.2	53.7	39.0	7.3	46.3
Gross motor (N=41)	14.6	75.6	90.2	9.8	0.0	9.8
Kindergarten						
Cognitive development (N=1250)	21.0	48.6	69.6	23.2	7.2	30.4
Degree of independence (N=1251)	18.6	57.8	76.4	18.6	5.0	23.6
Social development (N=1251)	15.8	57.9	73.7	20.5	5.8	26.3
Receptive communication (N=1244)	18.4	56.7	75.1	20.3	4.6	24.9
Expressive communication (N=1251)	16.9	54.3	71.2	22.5	6.3	28.8
Fine motor (N=1250)	18.2	54.6	72.8	21.0	6.2	27.2
Gross motor (N=1251)	18.0	71.1	89.1	9.4	1.6	11.0
K/1						
Cognitive development (N=31)	22.6	54.8	77.4	22.6	0.0	22.6
Degree of independence (N=31)	25.8	54.8	80.6	19.4	0.0	19.4
Social development (N=31)	25.8	58.1	83.9	16.1	0.0	16.1
Receptive communication (N=31)	25.8	61.3	87.1	12.9	0.0	12.9
Expressive communication (N=31)	25.8	58.1	83.9	16.1	0.0	16.1
Fine motor (N=31)	29.0	58.1	87.1	9.7	3.2	12.9
Gross motor (N=31)	32.3	61.3	93.6	6.5	0.0	6.5

Table 15 (cont'd)

Current Grade Placement	Percentages of Graduates Rated at Each Level[a]					
	Above class average	On line with class average	Total on line or above	Slightly below class average	Unsatisfactory	Total below or unsatisfactory
First Grade						
Cognitive development (N=882)	25.6	49.6	75.2	18.5	6.3	24.8
Degree of independence (N=885)	24.4	49.0	73.4	20.7	5.9	26.6
Social development (N=885)	17.9	58.9	76.8	17.9	5.4	23.3
Receptive communication (N=885)	20.1	53.8	73.9	21.1	5.0	26.1
Expressive communication (N=882)	19.5	53.5	73.0	22.0	5.0	27.0
Fine motor (N=884)	21.2	60.5	81.7	14.4	4.0	18.4
Gross motor (N=887)	18.6	72.2	90.8	7.6	1.7	9.3
1/2 Grade						
Cognitive development (N=20)	20.0	35.0	55.0	30.0	15.0	45.0
Degree of independence (N=20)	25.0	35.0	60.0	30.0	10.0	40.0
Social development (N=20)	20.0	40.0	60.0	25.0	15.0	40.0
Receptive communication (N=20)	20.0	35.0	55.0	30.0	15.0	45.0
Expressive communication (N=20)	20.0	40.0	60.0	25.0	15.0	40.0
Fine motor (N=20)	20.0	50.0	70.0	20.0	10.0	30.0
Gross motor (N=20)	20.0	50.0	70.0	20.0	10.0	30.0
Second Grade						
Cognitive development (N=687)	26.6	53.6	80.2	15.7	4.1	19.8
Degree of independence (N=690)	25.1	51.5	76.6	18.1	5.4	23.5
Social development (N=690)	20.7	57.0	77.7	18.6	3.8	22.4
Receptive communication (N=689)	22.6	54.0	76.6	20.2	3.2	23.4
Expressive communication (N=588)	20.6	53.2	73.8	22.1	4.1	26.2
Fine motor (N=690)	21.7	64.5	86.2	12.2	1.6	13.8
Gross motor (N=691)	21.1	72.4	93.5	5.6	0.9	6.5

Table 15 (cont'd)

Current Grade Placement	Percentages of Graduates Rated at Each Level[a]					
	Above class average	On line with class average	Total on line or above	Slightly below class average	Unsatisfactory	Total below or unsatisfactory
Third Grade						
Cognitive development (N=372)	30.9	54.8	85.7	12.1	2.2	14.3
Degree of independence (N=373)	30.3	52.3	82.6	14.8	2.7	17.5
Social development (N=373)	24.9	59.0	83.9	12.9	3.2	16.1
Receptive communication (N=372)	26.3	55.7	82.0	16.7	1.3	18.0
Expressive communication (N=372)	24.2	56.5	80.7	16.7	2.7	19.4
Fine motor (N=372)	29.0	61.8	90.8	8.1	1.1	9.2
Gross motor (N=373)	27.4	67.0	94.4	5.1	0.5	5.6
Fourth Grade						
Cognitive development (N=68)	36.8	51.5	88.3	11.8	0.0	11.8
Degree of independence (N=68)	33.8	47.1	80.9	17.7	1.5	19.2
Social development (N=68)	23.5	51.5	75.0	22.1	2.9	25.0
Receptive communication (N=68)	25.0	64.7	89.7	10.3	0.0	10.3
Expressive communication (N=68)	23.5	52.9	76.4	20.6	2.9	23.5
Fine motor (N=68)	27.9	61.8	89.7	8.8	1.5	10.3
Gross motor (N=67)	28.4	65.7	94.1	6.0	0.0	6.0

were so rated was that of gross motor skills (89.1%). The area of cognitive development was rated either slightly below average or unsatisfactory for 30.4% of these students.

Between 77.4% and 93.6% of students placed in transitional kindergarten (K/1) received ratings of on line with class average and above class average across the seven developmental areas addressed by the Follow-Up Study instrument. The gross motor skills area was again the one in which the greatest percentage (93.6%) were found to be successful, while the area of cognitive skills was the developmental area in which the greatest number (22.6%) were found to be somewhat unsuccessful.

Within the group of program graduates currently enrolled in first grade, ratings of at least on line with class average were reported with respect to between 73.0% and 90.8% of these former participants across all areas. Consistent with the performance of the preceding groups, the gross motor skills area was again the developmental areas in which success was most frequently observed (in 90.8% of these students.) The expressive communication skills area was the one in which the greatest percentage (27.0%) were assessed to be somewhat unsuccessful.

Between 55.0% and 70.0% of the students placed in transitional first grade (1/2) were rated to be at least on line with class average across the seven areas addressed. The greatest percentage of the students (70.0%) were found to be successful in the fine and gross motor skills areas. The areas in which these students were least successful were cognitive development and receptive communication.

Of the program graduates currently in second grade, between 73.8% and 93.5% were found to be on line with or above class average in each

of the seven developmental areas. The gross motor skills areas was again the one in which success was most often reported (93.5%). As was observed among the first grade students, the expressive communication skill area was that in which the highest percentage (26.2%) were reported to be slightly below class average or unsatisfactory.

Between 80.7% and 94.4% of current third graders received ratings of at least on line with class average in each of the seven developmental areas addressed. Consistent with all other groups, the area in which the greatest percentage (94.4%) received at least the on line with class average rating was gross motor skills development. The area in which these students were least successful was expressive communication, where 19.4% were rated as slightly below class average or unsatisfactory.

Of former participants who reached fourth grade during the 1989-90 school year, between 75.0% and 94.1% were assessed to be at least on line with class average. The gross motor skills area was again the area most highly rated. The area in which the highest percentage of these students were reported to be below class average was that of social development.

Evaluation Question 4: To what extent has the program met the needs of the total population of high-risk four-year-olds in Louisiana?

Eligibility Projections

Projections of the total number of high-risk four-year-olds potentially eligible for participation in the 1989-90 State-Funded

Table 16. Projections of the Total Number of High-Risk Four-Year-Olds Potentially Eligible for Participation in the 1989-90 State-Funded Program for High-Risk Four-Year-Olds

Total Live Births in Louisiana in 1985	Extrapolated Distribution of 1989 Households by Income					
	Under $10,000		$10,000-$14,999		Total Under $15,000	
	%	N	%	N	%	N
81,393	23.8	19,372	10.8	8,790	34.6	28,162

Program for High-Risk Four-Year-Olds are illustrated in Table 16. Estimates of the total population of four-year-olds currently in Louisiana during the 1989-90 school year were obtained from 1985 parish level birthrate data contained in the Board of Regents' report on birthrate history. As illustrated in the table, a total of 81,393 live births were recorded in Louisiana during 1985; these are the children that formed the 1989 pool of four-year-olds.

Based on the documented relationship between family income levels and the degree of school readiness exhibited by children within those families, parish and state income-level data were drawn from The 1988 Sourcebook of Demographics and Buying Power for Every County in the USA by CACI, Inc., as the basis for determining the number and percentage of high-risk children within the state's total four-year-old population. (Since the 1989 Sourcebook was not available, data from 1988 were used as the basis for extrapolating the 1989 income distributions.) In addition to the traditional use of $9,999 as the base poverty-level family income, the children of families within the $10,000-$14,999 range were also viewed as at risk. The number of high-risk four-year-olds estimated to be in Louisiana during the current 1989-90 school year was computed from the total number of children born in 1985, combined with the extrapolated percentage of families with 1988 incomes below the $15,000 level.

As drawn from the CACI sourcebook, 23.8% of the 1989 four-year-old population (81,393) were in households having annual incomes under $10,000; this represents 19,372 four-year-olds. The percentage of such children in households whose family incomes range from $10,000 to $14,999 was projected to be 10.8%, thus encompassing

an additional 8,790 high-risk four-year-olds. Adding the two thus results in a potential pool of 28,162 high-risk four-year-olds within Louisiana during 1989-90. This number represented 34.6% of the total population of four-year-olds in the state.

Eligibility to Service Ratio

Combining the data reported in Figure 1 concerning the number of students served by various programs with that reported in Table 14 relative to the total number of high-risk four-year-olds across Louisiana during 1989-90, produces the eligibility/service ratio information presented in Figure 1. As illustrated, the 1989-90 State-Funded Program for High-Risk Four-Year-Olds served 1653 high-risk four-year-olds. Based on Louisiana's total 1989-90 high-risk four-year-old population of 28,162 children, this program served 5.9% of the total number of eligible high-risk four-year-olds in the state. The federally-funded Head Start Program served 7536 high-risk four-year-olds, or 26.8% of the identified pool. The state's Chapter I Program served 14.3% of the high-risk four-year-old population, or 4032 children. Eight percent (2,242 students) were served by the Special Education Preschool Handicapped Program. Approximately 100 high-risk four-year-olds (1%) were served by other programs. Combining the numbers of high-risk four-year-olds served by these various programs indicates that 15,563 of the 28,162 children designated as at-risk were served. While this reflects a 55.3% service level (through the combination of state and federal funds), it indicates that 12,599 (44.7%) of Louisiana's high-risk four-year-olds did not receive needed services.

1989-90 High-Risk Four-Year-Olds (N = 28,162)

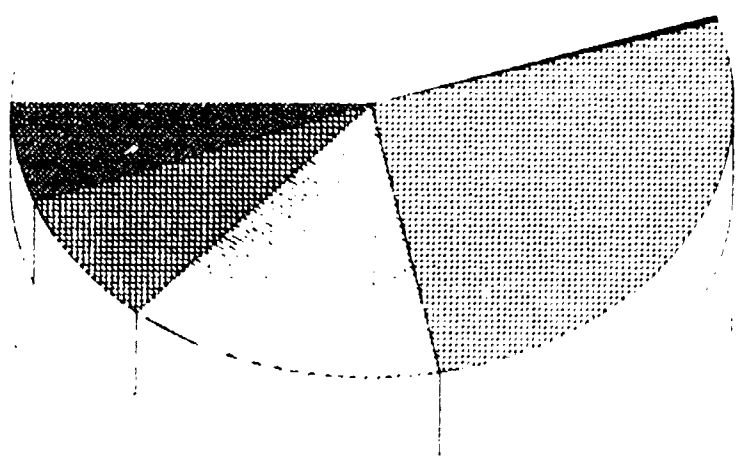


Figure 1. Number and Percent of High-Risk Four-Year-Olds Served During the 1989-90 School Year (Total Served = 55.3%, N = 15,563).

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Findings

The major findings of this study are summarized with respect to the evaluation questions addressed and are presented below.

Evaluation Question 1: What are the characteristics of the 1989-90 State-Funded Program for High-Risk Four-Year-Olds?

A. Participation level

- Sixty-two local school systems (94%) participated in the 1989-90 program.
- Overall, 1653 high-risk four-year-olds participated in the program.

B. Class type and enrollment

- A total of 85 classes (77 full-day and 8 half-day) were offered in 1989-90.
- Full-day classes ranged in size from 15-20 students, with a mean of 18 and a typical class size of 20.
- Half-day classes ranged in size from 15-20 students, with a mean of 18 and a typical class size of 20.

C. Program staffing

- A total of 83 teachers were employed in the 1989-90 program.

- Of that number, 47% held nursery school certification, 39% were kindergarten certified, and 14% were employed under Circular 665 or held Temporary Certificates.

D. Selection of participants

- The mandated participant selection criteria of age, screening results, $15,000 maximum income level, and parental commitment were used by all participating systems.
- Other frequently applied criteria included parent interviews, Chapter 1 eligibility, Head Start waiting lists and free lunch eligibility.
- The program served 44% of all four-year-olds who applied for participation.
- The Brigance Pre-School Screen was the screening instrument most often used in the selection process.

E. Family background

- Seventy-one percent of the 1988-89 participants were black and 28% were white.
- Sixty-six percent of participant family incomes were under $10,000 while 32% were between $10,000 and $15,000.
- Principal wage earners in participating families were most often unemployed (41%) or unski led laborers (39%).
- Thirty-four percent of the participants lived in intact family settings.

F. Instructional program characteristics

- o Assessments of students' progress, most often took the form of pretest-posttests (100%), teacher observations (95%), and parent/teacher conferences (57%).
- o Overall, 17 different pre-test/post-test instruments were being used.
- o Forty-eight percent of the systems ranked their pre-test/post-test instrument as very effective, while 44% ranked their instrument as effective.

G. Parental involvement

- o All of the 62 participating systems were reported to be involving parents in their programs.
- o Parental involvement activities most often consisted of attending meetings and workshops, helping with parties/special activities, and helping with field trips.

H. Transportation

- o Student transportation in both directions was provided by 60% of tne systems, while 3% provided transportation in one direction only.
- o Eighty percent of the systems that did not provide all transportation reported that the program was still accessible to the majority of students most in need of it.

I. Assessed strengths and weaknesses

- o Self-identified program strengths most often included the quality of the program and the staff; the early identification of and the assistance provided to at-risk children; and support from community and staff.
- o Self-identified weaknesses often included late and/or insufficient funding and limited parental involvement, particularly in instructional areas.

Evaluation Question 2: What is the per pupil expenditure in local programs?

A. Projects implemented

- o Seventy-four percent of the participating systems offered only one class for high-risk four-year-olds.

B. Full-day per pupil expenditures

- o Per pupil expenditures ranged from $1458 to $2661.
- o Per student contact hour expenditures ranged from $1.35 to $2.46.

C. Half-day per pupil expenditures

- o Expenditures ranged from $735 to $1024.
- o Per student contact hour expenditures ranged from $1.36 to $1.90.

Evaluation Question 3: What has been the longitudinal impact of the State-Funded Program for High-Risk Four-Year-Olds on "graduates" now enrolled in kindergarten through fourth grade?

A. Grade level progression

- o Overall, 81 percent of the program graduates were on grade level in terms of their progression through school.
- o Specifically, 57% of the 1984-85 participants were on grade level, as were 65% of the 1985-86 participants, 71% of the 1986-87 group, 81% of the 1987-88 group, and 97% of the 1988-89 group.

B. Mean performance ratings

- o Program graduates in fourth grade were on line with their peers in two developmental areas and between on line with class average and above class average in the other five areas.
- o Program graduates in third grade were reported to be on line with class average in one area and between on line with class average and above class average in the other six developmental areas.
- o Program graduates in second grade were between on line with class average and slightly below class average in two areas. These students were on line with their peers in three developmental areas and between on line with class average and above class average in the other two areas.

- Program graduates in first grade were between below class average and on line with their peers in five developmental areas, on line with class average in one area and above class average and slightly below class average in one area.
- Program graduates in kindergarten were between on line with class average and below class average in six developmental areas and above class average in one area.
- In general, students in pre-kindergarten and transitional first grade classes were slightly below class average in most of the seven developmental areas assessed. However, students in transitional kindergarten (K-1) classes were at least on line with class average in all areas.
- The area in which program graduates were most consistently given high ratings was that of gross motor skills development.

C. Rating percentages by performance level

- Among program graduates in pre-kindergarten classes, between 54% and 90% were at least on line with class average in each of the seven developmental areas examined.
- Among program graduates in kindergarten classes, between 70% and 89% were at least on line with class average in each of the seven developmental areas examined.

- Among program graduates in transitional kindergarten (K-1) classes, between 77% and 94% were at least on line with class average in each of the seven developmental areas examined.
- Among program graduates in first grade classes, between 73% and 91% were at least on line with class average in each of the seven developmental areas examined.
- Among program graduates in second grade classes, between 74% and 94% were at least on line with class average in each of the seven developmental areas examined.
- Among program graduates in third grade classes, between 81% and 94% were at least on line with class average in each of the seven developmental areas examined.
- Among program graduates in fourth grade, between 75% and 94% were at least on line with class average in each of the developmental areas examined.

Evaluation Question 4: To what extent has the program met the needs of the total population of high-risk four-year-olds in Louisiana?

A. Eligibility projections

- Of the estimated 81,393 four-year-olds in Louisiana in 1989, 28,162 (34.6%) were considered to be at risk.

B. Eligibility to service ratio

o During the 1989-90 school year services were provided to the following numbers of high-risk four-year-olds in Louisiana:

Program	Children Served	
	N	%
1. State-Funded Program	1,653	5.9
2. Head Start	7,536	26.8
3. Chapter 1	4,002	14.3
4. Special Education	2,242	8.0
5. Other	100	.4
Total Served	15,563	55.3
Total Remaining Unserved	12,599	44.7

Conclusions

The conclusions reached as a result of this study include the following:

- The State-Funded Program for High-Risk Four-Year-Olds is reaching its targeted population, but the current funding level severely limits both the number of such children who can be served and the potential impact of program services on the at-risk population as a whole.

  Rationale: The State-Funded Program served 1653 of the estimated 28,162 high-risk four-year-olds in Louisiana (5.9%). Through the combination of both state and federal sources, 55.3% of the at-risk four-year-old population receive services, but 44.7% remain unserved.

- The continued implementation of the Department of Education Regulations has resulted in greater adherence to those criteria previously identified as effective program correlates and should facilitate the attainment of model program status among all participating systems.

  Rationale: The increased specificity associated with participant eligibility, teacher qualifications, screening instruments, and class size has resulted in the implementation of a greater number and broader range of proven practices and procedures among all participating systems.

- As evidenced by the grade level progression and subsequent classroom performance of program graduates, the State-Funded Program for High-Risk Four-Year-Olds has had a positive effect on the preparation of participants for the regular school program.

  Rationale: Longitudinal data indicate that 81 percent of the students who participated in the program are on line with their peers in terms of their current grade-level enrollment. When compared with their present peers in each of the seven developmental areas addressed by the program, between 54% and 94% of the program graduates were assessed to be at least on line with their peers in terms of their classroom performance in each of these seven areas.

Recommendations

The following recommendations are offered on the basis of this evaluation of the 1989-90 State-Funded Program for High-Risk Four-Year-Olds:

- In view of the limited number of high-risk four-year-olds that could be served by the 1989-90 program, it is recommended that funds for program expansion be sought through all available federal, state, and local sources. The redirection of monies provided through Chapters 1 and 2, along with the continued availability of 8(g) funds for exemplary early childhood programs, should substantially increase the pool of funds available for serving at-risk children.

- In order to maximize the potential effectiveness of all local, state, and federal early childhood education programs in operation in Louisiana, it is recommended that a state-level task force be created to develop a state plan for ensuring the coordinated, consistent identification of eligible children and the provision of developmentally-appropriate services to these children. Such a plan could improve cost-effectiveness and eliminate potential service duplication, thereby increasing the total number of at-risk children who could be served through all available sources.

- Due to the number and variety of pre-test/post-test instruments in use, consideration should be given to narrowing the list of

appropriate instruments and providing guidance to local systems in the selection and use of those instruments.

- Longitudinal studies of former program participants should be continued in order to assess the sustained effects of the program on the subsequent classroom performance of program graduates. In order to facilitate this, as well as other longitudinal studies, it is strongly recommended that a student identification and information system be implemented statewide so that the impact of all monies directed toward education can be more accurately measured.

APPENDIX

DATA COLLECTION INSTRUMENTS

LOUISIANA DEPARTMENT OF EDUCATION
1989-90 STATE-FUNDED PROGRAM FOR HIGH-RISK FOUR-YEAR-OLDS
PROJECT DESCRIPTION SURVEY

PROJECT DIRECTOR: _____ PHONE NUMBER: _____

SCHOOL SYSTEM: _____

I. Location, Enrollment, and Staffing Data: Please provide the following information for each state-funded class for high-risk four-year-olds approved by the Bureau of Elementary Education.

School - Provide the name of the school in which the high-risk four-year-old class is located.
Length of Day - Circle H if the class if half-day (165 minutes in length) or F if the class is full-day (330 minutes in length).
Student Enrollment - Indicate the number of students enrolled in the class.
Aide - Circle N, HT, or FT to indicate the extent to which teacher aides are involved in your program as per the following:
N = No aide is employed in this class.
HT = One half-time aide is employed in this class (works for up to half the length of the specified class day).
FT = One full-time aide is employed in this class (works for the full length of the specified class day).

	SCHOOL	LENGTH OF DAY	STUDENT ENROLLMENT	AIDE
Class 1:	_____	H F	_____	N HT FT
Class 2:	_____	H F	_____	N HT FT
Class 3:	_____	H F	_____	N HT FT
Class 4:	_____	H F	_____	N HT FT

II. Teacher Qualifications

Please indicate the number of teachers in your program with the following:

A. Nursery school certification (may include other areas as well) _____
B. Kindergarten certification, but not nursery school (may include other areas in addition to kindergarten) _____
C. Elementary certification, but neither kindergarten nor nursery school _____
D. Other certification, excluding elementary, kindergarten, and nursery school _____
E. Employed under special conditions _____ (Fill in numbers employed under each type listed below.)

_____ Circular 665
_____ Temporary Emergency Permit
_____ Provisional Certificate
_____ Emergency Permit
_____ Temporary Certificate

F. No teaching certification or special condition(s) _____

III. Participation Selection Process

1. Which of the following criteria were used in the selection of program participants? (Check all that apply.)

___a. One year younger than the age required for kindergarten
___b. Identified as at-risk based on screening results
___c. From families with annual incomes under $15,000
___d. From families who agree to participate in program activities
___e. Parent interview
___f. Chapter I eligible family
___g. Head Start waiting list
___h. Free lunch eligibility
___i. Other (What? _____)

2. Please indicate the effectiveness of the screening instrument you used in identifying at-risk students for program participation by placing one of the following (VE, E, I, or VI) in the blank next to the instrument you used: (VE = very effective, E = effective, I = ineffective, or VI = very ineffective).

___a. Brigance Pre-School Screen for Three and Four-Year-Old Children
___b. Developmental Indicators for the Assessment of Learning (Dial-R)
___c. Denver Developmental Screening Test
___d. Early Recognition Intervention Systems (ERISys)
___e. Battelle Developmental Inventory
___f. Other (What? _____)

(Why used? _____)

3. How many applicants did you have for this program? _____

4. How many applicants are eligible but were unable to be served? _____

IV. Family Background

1. How many families of the children served by your program are:

___a. Black ___c. Hispanic ___e. American Indian
___b. White ___d. Asian ___f. Other

2. How many of these families have annual incomes in the following categories?

___a. $0 - $10,000
___b. $10,001 - $15,000
___c. Above $15,000 (Attach written justification for allowing such participants.)

3. How many parents or guardians (principal wage earners) of children enrolled in your four-year-old program have jobs in the following categories?

___a. Professional/technical
___b. Managerial/administrators
___c. Skilled laborers
___d. Unskilled laborers
___e. Unemployed

4. How many of your students are currently living in intact family settings with both mother and father? ____

IV. Program Description

1. How do teachers assess student progress? Check all that apply and then indicate the name of each instrument cited in the space provided.

___a) Commercially-developed skills checklists (Name:_____

_____ _____)

___b) Local/teacher-developed skills checklists (Name:_____

_____)

___c) Administration of pretest-posttest instrument(s) (Name:_____

_____)

Please indicate the effectiveness of the pretest-postest instrument.

___ Very Effective ___ Effective ___ Ineffective ___ Very Ineffective

___d) Parent/teacher conferences

___e) Teacher observations of student progress

___f) Other approaches (Name: _____)

VI. Parental Involvement

1. How are parents involved in your program? (Check all that apply.)

___a. Attendance in meetings/workshops
___b. Bringing snacks
___c. Helping with parties
___d. Helping with field trips
___e. Reading stories to the children
___f. Making materials
___g. Helping with art projects
___h. Helping on the playground
___i. Helping in the cafeteria
___j. Taking children to the library
___k. Helping in some other way

(What? _____)

VII. Transportation

1. How are participating children transported to and from the project site? (Check one.)

___a. System provides transportation in both directions.
___b. System provides transportation in one direction only.
___c. System provides transportation for students in areas served by established route but not for others
___d. Parents are responsible for transportation in both directions.
___e. Other arrangements (What? _____)

2. Answer this question only if you checked 1(b) or 1(c) or 1(d) immediately above. To what extent does transportation limit the accessibility of this program to those four-year-olds in your system who are most at risk? (Check one.)

___a. The majority are still able to participate.
___b. About half are able to participate.
___c. Fewer than half are able to participate.
___d. The program is inaccessible to those most in need.

VIII. Program Assessment

1. Among the following areas identified as the major strengths of the program, which apply to your 1989-90 program? (Check all that apply and add additional areas as appropriate.)

___a. Program quality, especially developmental aspects of program
___b. Parental involvement and participation
___c. Support from community, administration, and faculty
___d. Quality of teachers and aides
___e. Early identification of, and assistance provided to at-risk students
___f. Other (What?_____)

2. Among the following areas identified as the major weaknesses of the program, which apply to your 1989-90 program? (Check all that apply and add additional areas as appropriate.)

___a. Limitations associated with late and/or insufficient funding
___b. Limited parental participation in terms of number involved
___c. Limited parental involvement in instructional areas (e.g., reading stories, making materials, helping with art projects)
___d. Individually-identified weaknesses in specified developmental areas
___e. Limited facilities or equipment
___f. Limited administrative support
___g. Lack of properly certified teachers
___h. Other (What? _____)

IX. Comments

Use the space below to make any additional comments and/or suggestions about any aspects of your local program that were not addressed in this instrument.

X. Verification

I verify that the information contained in this Project Description Survey is accurate.

_____ _____

Superintendent's Signature Date

Return to:

Barbara Abshire
Louisiana Department of Education
Bureau of Evaluation and Analytical Services
P. O. Box 94064
Baton Rouge, LA 70804-9064

THANK YOU FOR YOUR CONTINUED COOPERATION AND SUPPORT. GOOD LUCK WITH YOUR 1989-90 PROGRAM.

LOUISIANA DEPARTMENT OF EDUCATION
1989-90 STATE-FUNDED PROGRAM FOR HIGH-RISK FOUR-YEAR-OLDS

FOLLOW-UP STUDY OF FORMER PROGRAM PARTICIPANTS

I. To be completed by PROJECT DIRECTOR

Please complete Part I for each student who participated in the State-Funded Program for High-Risk Four-Year-Olds (formerly termed the Early Childhood Development Program) between 1984 and 1989, and forward this form to the child's current K-4 teacher for completion of Part II. Please collect and return the completed forms to the Department no later than January 29, 1990

School System (1-2) _____ Student's Name (Last, First, Middle)(3-6) _____

84-85 85-86 86-87 87-88 88-89
Year of Participation (7-8)
(Circle one.)

pre-k k k/1 1 1/2 2 3 4
Present Grade Level (Circle One.) (9)

Present School _____ Present Teacher _____

II. To be completed by PRESENT TEACHER (K-4)

A. Student Information

1. Birthdate (month/day/year) _____ (10-15) 2. Sex (M or F) _____ (16)

3. Student race (Check one.) (17)

__Black __White __Hispanic __Asian __Native Amer. __Other

4. Attendance rate for first 12 weeks of 89-90 _____ (18-19)
(Days in attendance divided by 60)

5. Special services received by this student since participation in program (Check all that apply.)

a. Special Education ___ (20) c. Chapter 2 _____ (22)
b. Chapter 1 ___ (21) d. Other (Name _____)(23)

6. If this child has spent any time in a transition class, please indicate the number of years in that class by completing the blank next to the appropriate level.

a. Pre-K _____ (24) b. K/1 _____ (25) c. 1/2 _____ (26) d. Other _____ (27)

7. If this child has been retained since program participation, please indicate the number of times the child repeated the appropriate grade(s). Do not count the initial year spent at that level.

a. K _____ (28) b. 1 _____ (29) c. 2 _____ (30) d. 3 _____ (31)

B. Parent Information

1. How would you rate the level of classroom participation of this child's parents relative to that of the parents of other children in your class? (Check one.)

a. ____ more (32) b. ____ same (33) c. ____ less (34) d. ____ don't know (35)

C. Student Performance Data

Please use the following scale of indicators to assess the performance of the student identified above in comparison with the average performance of other children in the same class.

1 = above class average
2 = on line with class average
3 = slightly below class average
4 = unsatisfactory

CIRCLE the number that is closest to your assessment of the child's performance in each of the developmental areas identified below:

		above class average	on line with class average	slightly below class average	unsatisfactory
COGNITIVE DEVELOPMENT	(36)	1	2	3	4
DEGREE OF INDEPENDENCE	(37)	1	2	3	4
SOCIAL DEVELOPMENT	(38)	1	2	3	4
RECEPTIVE COMMUNICATION	(39)	1	2	3	4
EXPRESSIVE COMMUNICATION	(40)	1	2	3	4
FINE MOTOR DEVELOPMENT	(41)	1	2	3	4
GROSS MOTOR DEVELOPMENT	(42)	1	2	3	4

Cognitive development: counts, names, matches, recognizes, points out, recalls, etc.
Degree of independence: works on own, exhibits self-help skills in eating, dressing, toileting, grooming, exhibits self-confidence
Social development: interacts positively with other children and adults, follows directions, adapts to daily routine, accepts authority, exhibits school-appropriate behaviors
Receptive communication: uses receptive language, understands what is said
Expressive communication: Uses expressive language, expresses self in language
Fine motor development: folds, cuts, draws, colors, copies, etc.
Gross motor development: moves objects, moves body, etc.

State of Louisiana

State Department of Education

"Regulations for State-Funded Programs for High-Risk Four-Year-Olds"

Office of Academic Programs

Bureau of Elementary Education

(504) 342-3366

Approved by

Wilmer S. Cody

State Superintendent of Education

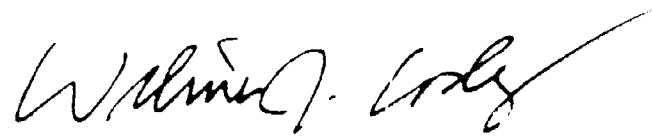
July 25, 1988

Foreword

The following "Regulations for State-Funded Programs for High-Risk Four-Year-Olds" have been developed from information and recommendations provided through four years of state-level evaluations relative to the existing state programs for high-risk four-year-old children.

The regulations address the seven broad areas repeatedly identified in research studies as critical in the provision of quality early childhood programs. The state parameters are consistent with state and national research findings and with guidelines and standards recommended by the National Association for the Education of Young Children (NAEYC), the Southern Association of Children Under Six (SACUS), and the Southern Association of Colleges and Schools (SACS).

These regulations apply to all state-funded programs for high-risk four-year-olds, including those "8g" programs that reference the existing state programs. Adherence to these regulations is critical in order to assure that appropriate programs are provided for young children.



Wilmer S. Cody
Superintendent of Education

Regulations For State-Funded Programs For High-Risk Four-Year-Olds

Program Philosophy

Local early childhood programs shall adhere to the developmental philosophy proven to be effective in early childhood education. Inherent in this philosophy is the provision of a child-centered program directed toward the development of cognitive, social, emotional, communication, and motor skills in a manner and at a pace consistent with the needs and capabilities of the individual child.

Eligibility Criteria

Projects shall serve children who are:

1. One (1) year younger than the age required for kindergarten
2. At-risk of being insufficiently ready for the regular school program based on screening results
3. From families with annual incomes under $15,000
4. From families who agree to participate in various activities associated with the program.

Teacher Qualifications

Teachers employed at the local school system for these projects shall be Louisiana-certified in the following:

1. Nursery school or
2. Kindergarten

Class Size Limitations

The class assignment of teachers and aides for the program shall be as follows:

Enrollment	Teacher	Aide
10-12	1	0
13-15	1	½ time
16-20	1	1

Length of School Day

The school day that systems operate (half-day or full-day) shall consist of one of the following:

1. Half-Day - 165 minutes of teacher-directed/child-initiated activities

2. Full-Day - 330 minutes of teacher-directed/child-initiated activities

Screening Instruments

The screening of children potentially eligible for program participation shall be accomplished through the use of those sections in one or more of the following instruments specifically designed for the identification of high-risk four-year-olds:

1. Brigance Pre-School Screen for Three and Four-Year-Old Children

2. Developmental Indicators for the Assessment of Learning (DIAL - R)

3. Denver Developmental Screening Test

4. Early Recognition Intervention Systems (ERISys)

5. Battelle Developmental Inventory - Screening Test

Program Design

Local early childhood programs shall be broad in scope and sensitive to the individual needs and capabilities of the young child. Such programs shall offer a curriculum in which each child is an active participant in varied activities targeted toward the development of specific concepts and skills.

The program shall be based on the following principles concerning human growth and development, and learning relative to high-risk four-year-olds:

1. A child learns as a total person (emotionally, socially, physically, and intellectually).

2. Children grow at individual rates.

3. Children learn through their senses (hearing, seeing, touching, tasting, and smelling).

4. Children learn through active involvement.

5. Children learn through attitudes as well as through content.

6. Children learn through play.

STANDARDS

1. Language Development

The program environment shall be designed to stimulate total language development. 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 ongoing activities

d. Reading to children daily

e. Informal exploration of picture books and other written materials

f. Visual and listening experiences

g. Extension of language concepts and skills through informal teaching and play activities

2. Physical Development

Activities related to the child's physical development shall be included on a daily basis. Learning centers shall be available that provide for:

a. Opportunities to hop, skip, jump, stretch, balance, climb, catch, and bend according to the child's individual developmental level

b. Manipulation of blocks, wheel and push toys, puzzles, and other manipulatives to develop small-muscle and eye-hand coordination

c. Opportunities to prepare and taste a wide variety of food and to discuss healthful eating habits

d. Opportunities to experience many dimensions of size and space

e. Outdoor, as well as indoor exploration

3. Social-Emotional Development

The environment (which includes teachers and aides) shall be responsive to the needs of the child, and should ensure that the child is free from undue frustration. The specified activities shall fit the child's developmental level. 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

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 Mathematical Development

Opportunities for the child to interact with the environment in the development of basic mathematical concepts and problem solving skills shall be provided on a daily basis. Learning centers shall be available that provide opportunities to:

a. Compare and contrast; to see, hear, taste, smell, and touch

b. Take apart, act on, and use diverse materials such as water, sand, earth, clay, puzzles, natural objects, and mechanical objects

c. Explore, manipulate, and count concrete objects

d. Recognize numerals through various materials including puzzles, games, recipes, books, pictures, and manipulative cut-outs

e. Develop 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

f. Develop an awareness of time intervals and spatial relationships through activities such as planning the day, marking the calendar, recognizing special days and holidays, exploring the surrounding space, mapping the classroom, and talking about over and under, up and down, and far and near

5. Creative Development

Activities shall be provided that stimulate and enhance creative and imaginative development. Learning centers shall be available that provide opportunities for:

a. Observation of the environment

b. Exploration through the use of a variety of art materials

c. Development of the ability to distinguish between fantasy and reality

d. Encouragement of imagination through play, verbalization, and artistic creation

e. Exploration of movement with and without music

f. Enjoyment of music through songs, listening, and musical games

g. Exploration of creative dramatics through story-telling, role-playing, and puppetry

h. Dictation of experience stories and recording of verbal experiences