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#### 

Student achievement of cognitive and psychomotor objectives was evaluated in Saginaw, Mighigan's prekindergarten program. During the 1985-86 year, 454 children participated, based on their Prekindergarten Readiness Screening Device scores. The half-day program was funded through Chapter 1 of the Education Consolidation and Improvement Act to develop the school readiness skills of 4-year-olds. The Prekindergarten Saginaw Objective Reference Test (PK-SORT) measured 13 of the 16 achievement objectives, using preand post-testing. Results indicated that 10 of the 13 objectives were achieved, and increases in both cognitive and psychomotor growth were noticed over the previous year. The other three objectives concerned parent participation and were measured using the Parents as Partners Sheet. Results showed that all three objectives were attained. Recommendations included: (1) conduct task analyses necessary to regroup and classify students; (2) reduce variations in outcome between the 13 school buildings: (3) define key curriculum elements in operational terms; (4) provide inservice training on expressive language development; and (5) write a teachers' manual. The objectives and data tables are appended. (GDC)



# EVALUA REPORT EVALUATION

PREKINDERGARTEN PROGRAM PRODUCT **EVALUATION REPORT** 

1985-86

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# DEPARTMENT OF EVALUATION SERVICES

- PROVIDING ASSESSMENT, PROGRAM EVALUATIO, AND RESEARCH SERVICES -

Saginaw Public Schools Saginaw, Michigan



# PREKINDERGARTEN PROGRAM PRODUCT EVALUATION REPORT

1985-86

An Approved Report of the
DIVISION OF ADMINISTRATION AND PERSONNEL
Department of Evaluation, Testing and Research

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June, 1986

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#### INTRODUCTION

#### Program Description

Saginaw's Prekindergarten Program, which has been in operation for the past sixteen years, is funded through Chapter 1 of the Education Consolidation and Improvement Act (ECIA). It is designed to provide four year olds with an environment that will enable them to develop skills needed for future success in school. The ultimate purpose of this program is to prepare inner city children, many of whom came from backgrounds that may not have equipped them with these skills, for entry into kindergarten. The program has goals and objectives (see Appendix A) that children, teachers, and parents work toward throughout the year. After a year of prekindergarten, these children should at least be on par with other children as they enter kindergarten.

This year there were approximately 458 children enrolled at thirteen buildings, one of which operated a half-day session. For the eighth consecutive year, the standardized 27 item <a href="Prekindergarten Readiness">Prekindergarten Readiness</a> Screening <a href="Device">Device</a> (PRSD) was individually administered. Selection for this year's program was based on the pre-schooler re-eiving a raw score of 19 or below. A total of 516 children were screened this year (1985-86) as opposed to 488 screened last year (1984-85).



Full day programs are operating at Baillie, Coulter, Emerson, Haley, Heavenrich, Houghton, Jones, Morley, J. Rouse, J. Loomis, Webber, and Longfellow. A half-day session operates at Salina.

The prekindergarten staff included a director, 13 certified teachers, 13 teacher aides, and a graphic arts/clerical aide. With the exception of the half-day sites, each school operated two sessions, one from 8:45 a.m. to 11:15 a.m., and another from 12:30 p.m. to 3:10 p.m. Class sizes varied from 13 to 20 children per half-day session.

# Procedures for Product Evaluation

A product evaluation measures the end results of a particular program. A process evaluation was also conducted this year, and these findings are reported in a separate report. The major product (or outcome) question was: Did the program attain the objectives it set out to accomplish?

To answer this question, the <u>Prekindergarten Saginaw Objective</u> Reference Test (PK-SORT) was used to assess student achievement on a pre- and post-test basis. The PK-SORT included 31 items dealing with both psychonotor and cognitive program areas. The first 17 items measured the program's nine cognitive objectives while the remaining 14 dealt with the four fine and gross motor objectives.

The other evaluation instrument is the <u>Parents as Partners</u>

<u>Sheet</u>, on which each teacher records the amount and type of parent participation that occurred during the year (objectives 14-16).



# PRESENTATION AND ANALYSIS OF PRODUCT DATA: PK-SORT

The PK-SORT was administered on October 7-16, 1985 and May 5-14, 1986 to all prekindergarten pupils. PK-SORT results will be reported separately for both cognitive and psychomotor subtest areas. The following results are based upon the testing of 458 and 414 pupils in October and May respectively. Summary post-test data for the cognitive subtest are contained in Table 1 below. The cognitive subtest measures nine objectives.





TABLE 1. SUMMARY OF NUMBER AND PERCENT OF PUPILS (414 TESTED) ATTAINING OBJECTIVES ON THE PREKINDERGARTEN SORT COGNITIVE SUBTEST IN MAY, 1986.

==			<del></del>	
Ohj.	Objective Description	Standard	Pupils Attaining Standard # %	Attainment of Objective
1	Physical Knowledge	80% of the pupils will correctly respond to 2 of 3 related items	366 88.4	Yes
2	Social Knowledge	80% of the pupils will correctly respond to at least 3 of 4 related items	363 87.7	Yes
3	Knowledge: Classification	50% of the pupils will apply 2 criteria for sorting	292 70.5	Yes
4	Knowledge: Logical-Mathematical -Seriation	70% of the pupils will answer at least 1 of 2 related items	302 73.0	Yes
5	Spatio-Temporal Knowledge: Structure of Time	50% of the pupils will respond correctly to at least 50% of the itens	298 72.0	Yes
6	Expressive Language: Labeling	85% of the pupils will label at least 4 objects in a picture	391 94.4	Yes
7	Expressive Language: Mean Length of Utterance	80% of the pupils will use at least 3 of 5 elements of fluency	317 76.6	У о
8	Expressive Language: Semantics	65% of the pupils will use at least 3 of 5 elements of fluency	244 58.9	Ио
9	Expressive Language: Plot Extension/ Expansion	50% of the pupils will use at least 1 element of plot extension in their description	344 83.1	Yes

Analysis of the data contained in the above table reveals the following:

- Prekindergarten pupils attained seven of the nine cognitive objectives.
- The two objectives not meeting the mastery criteria were expressive language: mean length of utterance and expressive language: semantics.



 Objective 6 (expressive language: labeling) demonstrated the greatest percentage of attainment (94.4%).

Summary data for the psychomotor subtest are presented in Table 2 which follows. The psychomotor subtest measures four objectives.

TABLE 2. SUMMARY OF NUMBER AND PERCENT OF PUPILS (414 TESTED) ATTAINING OBJECTIVES ON THE PREKINDERGARTEN SORT PSYCHOMOTOR SUBTEST NAY, 1986.

Obj.	Objective	Standard	Pupils Attaining Standard # %	Attainment of Objective
10	Fine Motor Coordination	80% of the pupils will perform at least 3 of 4 activities	344 83.1	Yes
11	Spatio-Temporal Knowledge: Structuring of Space (Order)	65% of the pupils will correctly pattern a topological relationship	272 65.7	Yes
12	Representation at the Symbol Level: Specific Shapes	65% of the pupils will copy 3 of 4 shapes	203 49.	No
13	Gross Motor Coordination	80% of the pupils will complete at least 3 of 4 movements	364 87.9	Yes

Analysis of the above data reveals the following results:

- Prekindergarten pupils attained three of the four objectives.
- Objective 12 continued to demonstrate the lowest attainment (49.0%).

The presentation of cognitive and psychomotor post-test achievement data by building are shown in Appendix B. A frequency distribution of the percent of pupil achievement by number of PK-SORT cognitive and psychomotor objectives mastered is given in Appendix C.

A comparison of this year's PK-SORT post-test results with last year's is reflected in Table 3 below.



TABLE 3. COMPARISON OF THE NUMBER, PERCENT AND DIFFERENCE BETWEEN 1985 AND 1986 PUPILS ATTAINING OBJECTIVES ON THE POST-TESTING OF THE PREKINDERGARTEN SORT.

Obj.	Objective Description	Pu N= Atta	985 pils 434 ining ndard	Pup N=4 Atta	86 ils l4 ining ndard	Be 198	ference etween 35 and 1986
1	Physical Knowledge	401	92.3	366	88.4	-	3.9
2	Social Knowledge	379	87.4	363	87.7	+	0.3
3	Knowledge: Classification	204	47.0	292	70.5	+	23.5
4	Knowledge: Logical- Hathematical-Seriation	263	60.6	302	73.0	+	12.4
5	Spatio-Temporal Knowledge: Structure of Time	295	68.0	298	72.0	+	4.0
6	Expressive Language: Labeling	394	90.8	391	94.4	+	3.6
7	Expressive Language: Mean Length of Utterance	319	73.5	317	76.6	+	3.1
8	Expressive Language: Semantics	227	52.3	244	58.9	+	6.6
9	Expressive Language: Plot Extension/Expansion	367	84.6	344	83.1	-	1.5
10	Fine Motor Coordination	344	79.3	344	83.1	+	3.8
11	Spatio-Temporal Knowledge: Structuring of Space (Order)	279	64.3	272	65.7	+	1.4
12	Representation at the Symbol Level: Specific Shapes	232	53.4	203	49.0	-	4.4
1 3	Gross Motor Coordination	374	86.2	364	87.9	+	1.7



A review of the above table indicates that:

- Of the thirteen objectives, ten showed increases while three other objectives showed decreases in the percent of pupils meeting the mastery criteria.
- Decreases ranged from 1.5 to 4.4 percentage points while the increases ranged from 0.3 to 23.5 percentage points.
- Objectives 1 (physical knowledge), 9 (expressive language: plot extension), and 12 (representation at the symbol level: specific shapes) showed the only decreases.
- Objectives 3 (knowledge: classification), 4
   (knowledge: logical-mathematical-seriation), and
   8 (expressive language: semantics) showed the
   greatest percent increases of +23.5, +12.4, and
   +6.6 respectively.

As mentioned earlier, pre-test results were obtained from all prekindergartners at the start of this year. Administering a pre-test has not been employed for a number of years because during the first four or five years of the program it appeared that a majority of the pupils could not master the PK-SORT at the start of the program and these low levels of mastery remained fairly constant from one year to the next. Since that time pre-testing has been dispensed with under the assumption that the screening test allowed the enrollment of only students needing the services offered by the program. Pre-testing now is only used every four or five years to check the earlier assumption of low mastery levels of incoming pupils. A comparison of summary pre-test data from both a sample of students in 1982-83 and the entire group for this year are presented in Table 4 below.



TABLE 4. COMPARISON OF THE NUMBER, PERCENT, AND DIFFERENCE BETWEEN 1982-83 AND 1985-85 PUPILS ATTAINING OBJECTIVES ON THE PRE-TESTING OF THE PREKINDERGARTEN SORT.

О <b>Б</b> ј.	Objective Description	N = Pupils	-83 Test* 97 Attaining ndard %	1985-8 Pre-Te N = 4 Pupils At Stan	Difference Between 1983 and 1986	
1	Physical Knowledge	45	46.4	175	38.2	- 8.2
2	Social Knowledge	47	48.4	144	31.4	- 17.0
3	Knowledge: Classification	16	16.5	78	17.0	+ 0.5
4	Knowledge: Logical- Mathematical-Seriation	22	22.7	80	17.5	- 5.2
5	Spatio-Temporal Knowledge: Structure of Time	42	43.3	119	26.0	- 17.3
6	Expressive Language: Labeling	68	70.1	249	54.4	- 15.7
7	Expressive Language: Mean Length of Utterance	41	42.3	131	28.6	- 13.7
8	Expressive Language: Semantics	16	16.5	43	9.4	- 7.1
9	Expressive Language: Plot Extension/Expansion	46	47.4	199	43.4	- 4.0
10	Fine dotor Coordination	30	30.9	91	19.9	- 11.0
11	Spatio-Temporal Knowledge: Structuring of Space (Order)	13	13.4	45	9.8	- 3.6
1 2	kepresentation at the Symbol Level: Specific Shapes	2	2.1	25	5.5	+ 3.4
1 3	Gross Motor Coordination	39	40.2	184	40.2	0

<sup>\*</sup>Students randomly sampled.



An examination of the above data revealed the following:

- Of the thirteen pre-tested objectives, two showed an increase, while ten orher objectives showed decreases in the number of pupils meeting the mastery criteria.
- Decreases ranged from 3.6 to 17.3 percentage points while the increases ranged from 0.5 to 3.4 percentage points.
- Objective 12 (representation at the symbol level: specific shapes) and 3 (knowledge: classification) showed the only pre-test to pre-test gains.
- Objective 13 (gross motor coordination) showed no change with 40.2% of the pupils meeting the standard.
- Objective 5 (spatio-temporal knowledge: structure of time), 2 (social knowledge),
   6 (expressive language: labeling), and
   7 (expressive language: mean length of utterance) showed the greatest percent declines of -17.3, -17.0, -15.7 and -13.7.

In reviewing the pre-test data, it appears that the average 1985-86 prekindergartner had attained fewer skills than the average 1982-83 pupil. While achievement was greater in two objective areas this year, the substantial number of objectives showed lower achievement. Thus it appears that today's prekindergartner generally score lower in most skill areas than youngsters in previous years.



when considering all the PK-SORT data (i.e., attainment of objective data in cognitive and psychomotor areas, comparison of 1985 and 1986 prekindergartner post-test attainment levels and the comparison of 1983 and 1986 prekindergartner pre-test attainment levels), it seems evident that children entering the program possess fewer skills and actually leave the program doing a better job than students in previous years. This improvement with pupils who score lower initially may be due in part to again having a full-time early elementary director to take charge of the program and its operation for the 1985-86 school year.



#### PRESENTATION AND ANALYSIS OF PRODUCT DATA: PARENTS AS PARTNERS

Parent participation has always been an important part of the Prekindergarten Program. This component is designed to provide parents with the skills they need to become directly involved in their children's education. Parents and other members of the family frequently are quite eager to provide these learning experiences for their child. The parenting component can provide them with specific information on how their interactions can contribute to their child's development.

The parent program had three main objectives:

- 14. 60% of the prekindergarten families will participate in the classroom or on field trips four times per year.
- 15. 60% of the prekindergarten families will participate in parent meetings four times per year.
- 16. 80% of the prekindergarten families will complete with the child nine home activities and return them to school.

The evaluation of this year's parenting component consisted of a year-end analysis of the data collected and recorded during the year.

Parent participation is an important component of this program.

Table 5 below presents a detailed view of how the program fared on each of the three objectives.



TABLE 5. ATTAIRMENT OF PRODUCT OBJECTIVES AS DETERMINED BY CUMULATIVE ANALYSIS OF SEPTEMBER TO JUNE PARENTS AS PARTNERS MONTHLY LOGS.

Total Families #	Families Meeting Standards # %	Objective Attained
421	342 81.2	Yes
421	356 84.6	Yes
421	373 88.6	Yes
	# 421 421	# # % 421 342 81.2 421 356 84.6

<sup>\*</sup>Mastery criteria for each objective stated in percent.

As an analysis of the above data indicates, the parenting component was a success. All three objectives met the attainment standard. Parenting data by building can be found in Appendix D.



#### SUMMARY AND CONCLUSIONS

The 1985-86 Chapter 1 Prekindergarten Program served approximately 450 children at thirteen elementary schools. A screening test was administered to each registrant to select the children who most needed this experience.

The <u>Prekindergarten Saginaw Objective Referenced Test</u> (PK-SORT) was employed to measure thirteen of the program's sixteen objectives. The results show that the program attained ten of the thirteen pupil achievement objectives (76.9%). A comparison between 1984-85 and 1985-86 post-test results evidenced noticeable increases in the rate of student growth in both cognitive and psychomotor areas.

Objectives 14, 15, and 16 are part of the product evaluation which deals specifically with the parents as partners component.

Results show that the program attained all three objectives.

The Saginaw Prekindergarten Program was successful in assisting children who participated to attain a large majority of the program's objectives. A review of the process and product data indicates certain areas where refinement or adjustments can be made to further improve the program. These suggested changes can be found on the following page in the form of recommendations.



#### RECOMMENDATIONS

The recommendations that follow are based on this year's process and product evaluation and are offered in an attempt to strengthen next year's program.

- Aspect of Classification. Staff with guidance from the Program Supervisor should conduct such a task analysis from simple to more complex tasks. Undoubtedly, this will involve purchasing additional materials to use in the classification activities that can be standardized across all the classrooms. In addition, teachers will have to make a conscious effort to include this or similar regrouping aspects on a daily basis.
- 2. Reduce variations in program outcomes between buildings. The program supervisor along with the staff should analyze the building results presented in Appendices B, C, and D for variations. A plan then should be formulated to reduce (or control) these variations in program impact. Of course, in some instances it is underscood that relatively poor performance was caused by an unanticipated problem, such as the extended illness of children because of flu, etc.
- 3. Define Key Elements of Curriculum in Operational Terms. This definitional process would move beyond a curriculum guide per se to specific activities that were appropriate for large group or center applications. Expressive language and regrouping activities would be two key areas where more specific lessons would be further defined.
- 4. Provide Inservice on Expressive Language Development.
  These staff development activities should deal with both formal and informal expressive language development exercises. Sample lesson plans for a day, week, and month should be developed in conjunction with this training. Common themes relative to both formal and informal expressive language development should be covered in these extended lesson plans. Expressive language activities conducted within the learning center concept should also be included.



b. Write a "How To Do Prekindergarten Manual". The staff along with the program supervisor should complete a Prekindergarten Handbook that explains in detail the program's goals, objectives, instructional approach, philosophy, expectations, and procedures. This document would be an excellent tool for all teachers, but particularly for newer ones. This would be an excellent document to define learning center operations more fully (e.g., when should adults float from center to center; quality versus quantity issue related to number of centers; critical centers and free choice centers defined; length of time at any one center; etc.).



APPENDICES



#### 1935-86 CHAPTER 1 PREVINDERGARTEN OBJECTIVES

#### 1. Physical Knowledge

80% of the pupils will demonstrate properties of and display appropriate behavior for exploring properties of objects by correctly responding to 2 of 3 items related.

#### 2. Social Knowledge

80% of the pupils will demonstrate knowledge of social roles by correctly responding to at least three of four items related to objective 2.

#### 3. Knowledge; Classification

50% of the pupils will successfully apply two criteria for sorting: color and/or form.

#### 4. Knowledge: Logical-Mathematical-Seriation

70% of the pupils will compare and arrange objects according to a given dimension of coordinating transitive relationships of at least one of two items of this objective.

#### 5. Spatio-Temporal Knowledge: Structuring of Time

50% of the pupils will respond correctly to at least 50% of the items related to temporal ordering of events.

#### 6. Expressive Language: Labeling

85% of the pupils will label at least four objects in the birthday party picture.

#### 7. Expressive Language: Mean Length of Utterance

80% of the pupils will use sentences of at least five words to describe the birthday party picture.

#### 8. Expressive Language: Semantics

65% of the pupils will use at least three of five elements of fluency in their description of the birthday party picture.

#### 9. Expressive Language: Plot Extension/Expansion

50% of the pupils will use at least one element of plot extension in their description of the birthday party picture.



#### APPENDIX A

# 10. Fine Motor Coordination

80% of the pupils will successfully perform at least three of four activities involving hand/eye coordination.

#### 11. Spatio-Temporal Knowledge: Structuring of Space (Order)

65% of the pupils will correctly respond to topological relationships of order or pattern.

# 12. Representation at the Symbol Level: Specific Shapes

65% of the pupils will copy successfully three of four shapes.

# 13. Gross Motor Coordination

80% of pupils will successfully complete at least three of four large movements of the body.

#### 14. Parent Participation

60% of the adult members of the prekindergarten family will participate in school activities at least four times per year.

# 15. Parent Education Program: Friday Meetings

60% of the adult members of the prekindergarten family will participate in at least four Friday meetings.

# 16. Parent Education Program: Home Work Activities

80% of the adult members of the prekindergarten family will help the child complete at least nine prekindergarten home activities and return them to school.



#### APPENDIX B

THE R.I. COMPARISON OF THE PROCESS OF STATISTICS AT POST-CENTERS ACTIVATION CONTRACTORS OF INCLUSING FOR 1994-05 AND 1995-06.

PK SORT UNIECTIVES	BNI	LLIE	œu	LTER	ĐE	<b>150</b> 1	HAL.	EY	HEAVE	MICH	HOL		JOH	ES	LONE	ETTUM	1,00	MIS	HORE	ey	ROUS	E	SALI	M	WEDE	er
OLELI IVES	1985	1986	1985	1986	1985	1906	1965	1906	1965	1986	1985	1986	1965	1986	1985	1986	1985	1986	1985	1986	1985	1986	1965	1986	1985	1986
1 (80)*	89.5	20.9	0.001	83.3	94.4	100.0	97.2	96.4	0.001	<b>#0.0</b>	0.001	100.0	82.8	68.4	100.0	87.5	71.0	82.5	<b>8</b> 0.0	<b>93.3</b>	91.2	97.1	0.001	93.8	97.1	90.6
2 (80)	55.3	66.7	97.1	91.7	86.1	84.3	100.0	100.0	90.6	80.0	100.0	J(#).0	86.2	84.2	97.5	80.0	81.6	82.5	63.3	93.3	97.1	86.2	88.2	93.8	91.2	96.9
3 (50)	2.6	47.6	74.3	91.7	16.7	53.1	16.7	60.7	62.5	73.3	54.3	100.0	27.6	78.9	92.5	60.0	36.8	47.5	50.0	53.3	61.8	82.3	52.9	81.3	64.7	81.3
4 (70)	44.7	36.1	91.4	66.7	44.4	50.0	55.6	78.6	56.3	56.7	28.6	97.3	41.4	81.6	95.0	87.5	60.5	75.0	60.0	73.3	79.4	79.4	29.4	93.8	79.4	59.4
5 (50)	65.8	66.7	94.3	75.0	50.0	62.5	83.3	92.8	59.4	43.3	48,6	89.2	55.2	78.9	82.5	47.5	78.9	97.5	56.7	66.7	55.9	52.9	64.7	68.8	79.4	87.5
₩ 6 (85)	78.9	100.0	100.0	97.2	77.8	100.0	100.0	96.4	100.0	%.7	100.0	100.0	93.1	97.4	82.5	77.5	94.7	92.5	76.7	96.7	88.2	<b>62.3</b>	86.2	100.0	100.0	100.0
7 (80)	76.3	57.1	<b>%.</b> 3	88.9	55.6	87.5	47.2	85.7	96.9	96.7	77.1	94.6	62.1	76.3	65.0	42.5	89.5	72.5	<b>60.</b> 0	96.7	47.1	32.3	94.1	81.3	0.001	90.6
8 (65)	52.6	52.4	97.1	<b>60.6</b>	36.1	75.0	16.7	7.1	<b>93.8</b>	%.7	57.1	64.9	55.2	65.8	47.5	35.0	ኤ.3	75.0	40.0	83.3	20.6	20.6	47.1	0.0	36.2	75.0
9 (50)	76.3	85.7	0.001	72.2	50.0	84.4	0.001	100.0	96.9	76.7	94.3	94.6	72.4	68.4	90.0	75.0	92.1	85.0	43.3	63.3	97.1	91.2	94.1	93.8	91.2	100-0
10 (80)	57.9	71.4	<b>80.</b> 0	69.4	83.3	93.8	63.9	50,0	90.6	63.3	94.3	HXX.0	62.1	92.1	100.0	77.5	78.9	80.0	66.7	100.0	94.1	<b>65.3</b>	41.2	87.5	94.1	84.4
11 (65)	34.2	57.1	88.6	66.7	25.0	34.4	55.6	82.1	87.5	36.7	88.6	<b>94.</b> 6	44.8	89.5	100.0	65.0	44.7	55.0	43.3	43.3	76.5	64.7	70.6	68.8	76.5	87.5
12 (65)	21.0	28.6	54.3	55.6	41.7	62.5	72.2	25.0	56.3	66.7	62.9	78.4	37.9	65.8	65.0	37.5	55.3	50.0	56.7	50.0	70.6	44.1	29.4	37.5	58.8	62.5
13 (80)	76.3	<b>9L.</b> 5	97.1	86.9	77.8	78.1	97.2	96.4	90.6	90.0	0.001	94.6	82.8	97.4	90.0	72.5	84.2	97.5	66.7	76.7	85.3	94.1	82.3	81.3	85.3	81.3

Minetery criteria for each objectives stated in percent.



# APPENDIX C

TABLE C.1. FREQUENCY DISTRIBUTION OF PERCENT OF PUPIL ACHIEVEMENT ON PREKINDERGARTEN SORT COGNITIVE SUBTEST BY SCHOOL, MAY, 1986.

School		Numbe	er of Object	ives Maste	red	
	7-9	6	4-5	2-3	1	0
Baillie	47.6	4.8	42.9	4.8	0.0	0.0
Coulter	75.0	5.6	13.9	5.6	0.0	0.0
Emerson	56.3	34.4	9.4	0.0	0.0	0.0
Haley	85.7	3.6	10.7	0.0	0.0	0.0
Heavenrich	66.7	13.3	20.0	0.0	0.0	0.0
<b>Houghton</b>	97.3	2.7	0.0	0.0	0.0	0.0
Jones	63.2	5.3	26.3	5.3	0.0	0.0
Longfellow	55.0	20.0	10.0	2.5	2.5	10.0
Loomis	67.5	17.5	10.0	2.5	0.0	2.5
Morley	76.7	10.0	10.0	3.3	0.0	0.0
Rouse	47.1	17.6	29.4	5.9	0.0	0.0
Salina	81.3	6.3	6.3	6.3	0.0	0.0
Webber	90.6	9.4	0.0	0.0	0.0	0.0



# APPENDIX C

TABLE C.2. FREQUENCY DISTRIBUTION OF PERCENT OF PUPIL ACHIEVEMENT ON PREKINDERGARTEN SORT PSYCHOMOTOR SUBTEST BY SCHOOL, MAY, 1986.

School	Numbe	er of Obje	ctives Ma	stered
	3-4	2	1	0
Baillie	52.4	23.8	23.8	0.0
Coulter	66.7	22.2	5.6	5.6
Emerson	59.4	31.3	9.4	0.0
Haley	42.9	42.9	14.3	0.0
Heavenrich	63.3	26.7	10.0	0.0
Houghton	97.3	2.7	0.0	0.0
Jones	92.1	2.6	2.6	2.6
Longfellow	55.0	22.5	12.5	10.0
Loomis	62.5	27.5	7.5	2.5
Morley	56.7	30.0	13.3	0.0
Rouse	67.6	17.6	14.7	0.0
Salina	62.5	25.0	12.5	0.0
debber	71.9	25.0	0.0	3.1



TABLE D.1. SUMMARY OF NUMBER AND PERCENT OF PREKINDERGARTEN FAMILIES ATTAINING OBJECTIVES REGARDING THE PARENTS AS PARTNERS COMPONENT BY BUILDING, 1985-86.

School	Number of Students	Number of	Objec	tive 14	0 <b>bje</b> c	tive 15	Objective 16		
Senool	Enrolled*	Students Attending**	*	z	*	2	#	z	
Baillie	35	27	26	(96.3)	23	(85.2)	27	(100.0)	
Coulter	42	36	33	(91.7)	36	(100.0)	36	(100.0)	
Emerson	50	32	27	(84.3)	30	(93.8)	31	(96.9)	
Haley	41	32	29	(90.6)	2 2	(68.8)	29	(90.6)	
Heavenrich	36	30	21	(70.0)	22	(73.3)	12	(40.0)	
Houghton	46	37	37	(100.0)	37	(100.0)	37	(100.0)	
Jones	44	38	17	(44.7)	30	(79.0)	38	(100.0)	
Longfellow	43	36	22	(61.1)	33	(91.7)	33	(91.7)	
Loomis	46	39	33	(91.7)	29	(74.4)	38	(97.4)	
Morley	37	31	23	(74.2)	20	(64.5)	27	(87.1)	
Rouse	48	35	27	(77.1)	28	(80.0)	18	(51.4)	
Salina	25	16	15	(93.8)	14	(87.5)	15	(93.8)	
Webber	45	32 .	3 2	(100.0)	32	(100.0)	32	(100.0)	
TOTAL	538***	421	342	(81.2)+	356	(84.6)+	373	(88.6)	

<sup>\*</sup>Number of students enrolled and attending program for any length of time.



<sup>\*\*</sup>Number of students enrolled and attending more than four months.

<sup>\*\*\*</sup>This figure includes duplicate students who were enrolled at two or

more different sites during the year.

<sup>+</sup>Objective attainment.