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ABSTRACT

A study was conducted to investigate the effects of child and parent incentives on the acquisition of reading readiness skills of educationally disadvantaged preschool children. Ss were 121 students from Title I kindergarten classes. Four bilingual paraprofessionals were trained to interview parents, administer the pre- and post-tests, and operate the incentive systems at each of the schools. Of the four schools, parents of students in two schools were provided with cash incentives for attending each session. Children in two schools were involved in a progressive incentive system. For every four weeks, there was a subskills test (pre and post) and a different incentive plan, which progress from immediate reinforcement to delayed reinforcement to social reinforcement. Results showed that: (1) there was no statistically significant difference on the improvement of intelligence scores regardless of the child's motivational style or the incentive system used; (2) the parent and child incentive groups performed significantly better than the child or parent incentive groups on the visual discrimination test; (3) when intelligence is held constant, there was no statistically significant difference between ethnic groups on the Clymer-Barrett Pre-Reading Battery, but there was a statistically significant difference between ethnic groups on the informal reading readiness subskill test of matching letters; (4) the parent group receiving incentives demonstrated greater attendance behavior than those parents who did not receive incentives. (KM)

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FINAL REPORT

THE EFFECT OF INCENTIVES ON READING READINESS SKILLS

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TABLE OF CONTENTS

INTRODUCTION	1
PURPOSE.	2
RELATED LITERATURE AND RESEARCH.	2
OBJECTIVES OF THE STUDY.	8
METHODOLOGY.	9
DATA ANALYSIS.	14
RESULTS AND CONCLUSIONS.	37, 40
DISCUSSION	42
BIBLIOGRAPHY	46
APPENDIX A	
INDIVIDUAL TEST SCORES BY SCHOOLS.	51
APPENDIX B	
A SYNOPSIS OF AIDE ACTIVITIES.	52
APPENDIX C	
QUESTIONS AND RESPONSES FROM PRE-PARENT INTERVIEWS	53

TABLE OF CONTENTS
(Continued)

APPENDIX D

FOLLOW-UP INTERVIEW LETTERS TO PARENTS 54

APPENDIX E

SKILLS INTRODUCED DURING PROGRAM 55

APPENDIX F

TESTS ADMINISTERED BY INCENTIVE SCHEDULE 56

APPENDIX G

POST-PARENT QUESTIONNAIRE. 57

LIST OF TABLES

Table 1. Analysis of Covariance for Peabody
Picture Vocabulary Test Scores 15

Table 2. Peabody Picture Vocabulary Test
by Incentive Groups by the
Scheffé Method 16

Table 3. Peabody Picture Vocabulary Test by
Motivational Style by the Scheffé
Method 16

Table 4. Analysis of Covariance for Clymer-
Barrett Pre-Reading Battery, Visual
Discrimination Subtest 17

Table 5. Clymer-Barrett Pre-Reading Battery
Visual Discrimination Test by
Incentive Group by the Scheffé
Method 18

Table 6. Analysis of Covariance for Clymer-
Barrett Pre-Reading Battery
Auditory Discrimination Test 18

Table 7. Clymer-Barrett Pre-Reading Battery
Auditory Discrimination by
Incentive Groups by the Scheffé
Method 19

LIST OF TABLES

Table 8.	Analysis of Covariance for Matching Letters	20
Table 9.	Analysis of Covariance for Letter Names	20
Table 10.	Analysis of Covariance for Letter Sounds	21
Table 11.	Analysis of Covariance for Letter (Name) Writing	21
Table 12.	Analysis of Covariance for Clymer-Barrett Pre-Reading Battery Visual Discrimination Test	22
Table 13.	Clymer-Barrett Pre-Reading Battery, Visual Discrimination Test by Incentive Groups by the Scheffé Method	22
Table 14.	Analysis of Covariance for Clymer-Barrett Pre-Reading Battery, Auditory Discrimination Test	23
Table 15.	Analysis of Covariance for Matching Letters	24
Table 16.	Analysis of Covariance for Letter Skills	25
Table 17.	Analysis of Covariance for Letter Name Skills	25
Table 18.	A Comparison of Letter Names Skills by Schools by the Scheffé Method	26
Table 19.	Analysis of Covariance for Letter (Names) Writing Skills	26
Table 20.	Parent Attendance by Incentive System	27
Table 21.	Parental Attendance by Incentive System	29
Table 22.	Consensus of Parental Opinion by Incentive System	30
Table 23.	Analysis of Variance for Murphy-Durrell Reading Readiness Analysis	33

LIST OF TABLES

Table 24. Analysis of Variance for Murphy-Durrell Reading Readiness Analysis by Individual School 34

Table 25. Individual Schools by the Scheffé Method 34, 35

Table 26. Percentage Comparisons of Past and Present Students Ready to Begin a Formalized Reading Program 36

INTRODUCTION

A major problem faced by educators is the number of children entering school from low socio-economic areas without the necessary reading readiness skills to enter a formalized reading program. As a result, it is no surprise to discover, as public school records clearly indicate, that children from low socio-economic areas do not, as a group, acquire the critical readiness skills as well as students from other socio-economic levels.

Some educators relate that the problem is the home environment, lack of language skills, lack of parental interest, poor child attitudes, etc. as the cause for the low achievement. Although these are valid contributors to the problem, educators must search for more effective means to accelerate achievement for this population. It is obvious that the child, faced with social, cultural and economic limitations, will need additional assistance to increase self-confidence and to develop the essential reading readiness skills so that he can achieve on par with children from other socio-economic levels.

There is little doubt that preschool programs are beneficial as many studies have demonstrated this empirically. Parents, paraprofessionals and teachers can be trained to improve the cognitive development of low socio-economic children at the preschool level. However, it has yet to be determined what type of incentive or motivational approach is the most effective to interest parents,

or what child motivational system and style results in more effective learning with disadvantaged children.

PURPOSE

The purpose of this study is to investigate the effects of child and parent incentives on the acquisition of reading readiness skills of educationally disadvantaged preschool children.

RELATED LITERATURE AND RESEARCH

Importance of Parents

The effect of parental involvement is deemed essential for preschool programs. Karnes (25), Painter (40), Ohran and Radin (37), Gray and Klaus (20), and Deutsch (10) have indicated that parents from low socio-economic areas are capable of helping their children if given the opportunity and the appropriate instruction. The investigations by Crow, et al. (8), Fusco (15), Gordon (19), Mann (30), Weikart (54), and Levenstein (29) have also stressed the importance of parent behavior for the cognitive training of preschool children.

Schaefer (42) reported that the training of children in various skills has positive results. However once training ceases, the student tends to regress in the skill areas to a pre-training status. There is an apparent need to continue the stimulation of children upon completion of preschool programs. Parents and other family members are the logical stimulators since the home is the

child's environment. Skinner (48) and Schwitzebel (45) noted that motivation to learn, or the lack of it, is a behavioral response to environmental contingencies rather than a manifestation of non-concern or laziness. Parental training is needed not only to continue stimulating the child in a program but also to assist the parent with other children at home.

Although parental training is invaluable, the question is one of convincing parents to attend training sessions, and more important, how to sustain this involvement over a period of time. Parent-teacher workshops, potluck dinners, and other social affairs have generally generated a low rate of parental attendance. Informal coffee sessions at a parent's home appears to be one effective procedure (34). Another alternative is the use of payment to the parents as proposed by Singell and Yoder (47).

Niedermeyer (36), Stuart (51), and Karens (26) have used parent incentives with significant results. This approach might be the vehicle to entice and sustain parental involvement necessary to conduct the training to ultimately assist the child. Several parent incentive studies are presently being conducted by the U. S. Department of Health, Education and Welfare that will offer additional insight into this approach on a large scale basis.

Incentives to Motivate Children

Intrinsic and extrinsic motivational styles are the two classes of theories commonly referred to in the literature to motivate human performance. These motivational processes, especially

extrinsic, are common in middle socio-economic homes; whereas, the parents of low socio-economic homes often lack the understanding of the behavioral training necessary to train children for future school success. Haywood (22) stated:

"What appear to be deficits in cognitive ability, particularly in disadvantaged children ... may very well be deficits in inclination to achieve or deficits in motivational systems."

He indicated that disadvantaged "Head Start" children are significantly more extrinsically motivated than children from private preschools. Getzels (18) stated in reference to incentives and rewards that the promise of future reward is not sufficient. He elaborated further:

"The lower class child has experienced only a survival or subsistence ethic (not achievement ethic) with consequent high valuation on the present (not future) on immediate gratification (not deferred gratification) and concrete commitment (not symbolic commitment). Where the lower class child lives, hardly anyone ever gets to the top -- often one can hardly move across the street. And time is not important or potentially valuable if there is not going to be anything to do with it anyway. The commitment is to immediate and concrete gratification -- to the satisfaction of here and now -- for what does an appeal to symbolic success mean where success is measured only by subsistence or survival?"

Incentives is not a current innovation but has been used universally, in one form or another, as a means to improve behavior and academic performance. White (55) in 1886 discussed the importance of motivation and incentives as related to education. Although incentives have been employed in education, they have been used more with atypical than typical students. Material

incentives and knowledge of results have commonly been utilized as primary reinforcers, whereas secondary reinforcers have included such things as points, tokens, money, and delayed social rewards. Praise has been classified as a primary and secondary reinforcer in the Mesa "Incentives Only" Project which contains a model for moving from primary to secondary reinforcers (1).

Incentives have been used in many different contexts. The recent U. S. Office of Economic Opportunity Performance Contracting experiment concluded that incentives were not effective to improve or accelerate the basic skills competencies of disadvantaged students (3). Chadwick and Day (5) used material reinforcers to improve behavior and academic performance as did Risely and Hart (41). Barnard (2) reported that incentives to students resulted in better behavior, and students were able to attend to a given task for a longer period of time than the control group. Fygetakis and Gray (16) used tokens that could be exchanged for toys that resulted in improved language skills of linguistically divergent preschool children. Heitzman (24) also used tokens as the incentive to significantly improve basic skills achievement of migrant primary school students. Although material incentives appear to change behavior and performance, they might not be the most effective incentive.

Spence (49) reported that candy rewards resulted in poorer performance than verbal statements of right or wrong with preschoolers and elementary children. A similar finding was reported by Marshall (31) in a laboratory learning experiment with Caucasian

kindergarten children. Unikel, Strain, and Adams (53) reported no difference with candy versus teacher praise when work-
ing with five and six year old Anglo children in Project "Head Start".

Secondary reinforcers establish their value by the exchange of points or tokens for goods, services and privileges. One requirement for specific behaviors, which serves as the criteria for incentives delivery, is that they must be public events, open to reliable observation (33). Public records of rewardable behavior, i.e., circling numbers on cards (6); writing names on the blackboard (43); placing marbles in a holder (31); and writing out a little blue ticket (52) have been used as secondary reinforcement systems.

In some studies, tokens were exchanged for candy or toys (24, 32, 38). Tickets to special events were used as the exchange in a study by Bushell, Wrobel and Michaelis (4), and special privileges was the exchange used by Packard (39). Once a system for delivery and exchange has been established, secondary incentives seem to be as effective as primary incentives to influence behavior.

The effects of teacher verbal support and teacher praise have been widely studied as a social incentive. Thirty-three studies, performed over the previous 50 years on the use of praise and blame as incentives, were reviewed by Kennedy and Willcutt (27). In this review it was concluded that:

"... when one corrects for practice, as with the use of a control group, praise is a reasonably stable incentive from study to study, contributing an incremental effect upon the performance and learning of school children."

The use of incentives in education appears to be an effective motivational technique, but strict control of environment is necessary (44, 46). Davidoff (9) generalized that the behavior should be important and demonstrate a definite relationship to the attainment of various goals in education. Once performance objectives are defined, the criteria for incentive delivery must be determined.

The criteria for delivery has been varied, ranging from immediate rewards for minute changes in behavior to the delay of the incentives over a lengthy period of time. However, most incentive delivery systems are very short in time duration (13). The use of an incentive for a correct answer is common as indicated by the work of Staats, Finley, Minke and Wolf (50), Wolfe, Giles and Hall (56) and Frase (14). Clark (7) stressed that, whatever, the criteria of gain should be relative to ability and performance of the subject population.

Studies involving direct, personal delivery of incentives have been of the variety of teacher praise, special attention, and rewards. A variation of this pattern was used by Hart and Risley (21) in a preschool situation which paired teacher praise with snacks when the desired performance was attained.

Although there are many studies showing the different incentive delivery systems for different groups, no research to date

could be located relating the effect that different incentive delivery systems have in accelerating achievement with the same group of students with different motivational styles.

OBJECTIVES OF THE STUDY

This investigation sought information relevant to the following questions:

1. Is there a statistical significant difference in intelligence scores as related to the motivational style of the subjects and the incentive delivery system?
2. Is there a statistical significant difference between motivational style and the incentive delivery system on reading readiness achievement?
3. Is there a statistical significant difference between motivational style and the incentive delivery system on reading readiness subskill achievement?
4. Is there a statistical significant difference between ethnic groups and the incentive delivery system on reading readiness achievement?
5. Is there a statistical significant difference between ethnic groups and the incentive delivery system on reading readiness subskill achievement?
6. Is there a statistical significant difference with parental attendance behavior between those receiving incentives and those not receiving incentives?
7. Is there a statistical significant difference on the retention of reading skills between the four groups of low socio-economic level children and four groups of middle socio-economic level children after a three months' lapse of time?

METHODOLOGY

The subjects involved in this study were 121 students from Title I schools in kindergarten classes which were randomly selected from seven Title I schools in Mesa, Arizona. Each of the four schools involved had a morning and afternoon kindergarten session with approximately 20 students per class and a total of 166 students involved in the initial testing session. Because of transfers, illness, etc., only 121 students took all pre and post test instruments. Individual test scores, by schools, can be found in Appendix A.

Title I schools were selected because of the composition of various ethnic groups which met the low socio-economic criterion. The Indian population was limited as this group elected to have their own preschool program on the reservation. This resulted in decreased numbers for statistical analysis, necessitating the ethnic groups to be placed into Anglo and non-Anglo groups for analysis purposes.

Procedures

The study was conducted from September 1971 to February 1972. After the schools were selected, four bilingual paraprofessionals from the community were hired in August and trained in the goals and procedures of the program. Practice in administering the tests utilized in the study was given along with interviewing procedures and techniques for conducting inservice training with parents. Each paraprofessional had the responsibility of operating the incentive

system at one of the four Title I schools. A synopsis of aide activities is presented in Appendix B.

The first duty of the paraprofessional was to personally contact and interview parents of the children in specified Title I schools. Each interview sought to determine the willingness of the parents to participate, their feelings toward incentives, the best day and time for training sessions, and what type of incentive would seem most appropriate for them. No effort was made to conceal the fact that some parents would/would not receive incentives. A copy of the questions posed and the responses can be found in Appendix C. The interview was followed by a letter to each of the four groups (see Appendix D) explaining the program.

The second responsibility of the aide was to administer the necessary tests at the school. The tests used were the Peabody Picture Vocabulary Test to determine intelligence levels, the Haywood Picture Motivation Scale to determine the motivational style of each child, the Clymer-Barrett Pre-Reading Battery Test to determine the child's level of pre-reading skills, and an adapted portion of the Murphy-Durrell Letters in Words Test for reading subskills. Testing was conducted in quiet, well-lighted rooms on an individual basis. If any signs of child frustration or emotional upset were noted by the examiner, the testing was terminated. Alternate forms of the same instruments, with exception of the Haywood Picture Motivation Scale, were administered at the end of 20 weeks to measure gains.

On-Going Program

Training sessions were held for the four paraprofessionals on each Friday. Creative activities designed to teach specific reading readiness skills were developed and explained to the classroom teachers so that they could coordinate them with their schedule. Materials were collected weekly so that the four paraprofessionals could provide the necessary materials to conduct the inservice training for parents on Mondays. Parents would then develop the games to be used on Tuesday of every week in the classroom. The games and other material produced were given to each parent to take home for activity with other children in the home environment. Teachers and aides were available in the classroom, but basically the parents operated the program. Techniques to help parents with behavioral problems were presented by a psychologist. Health and nutrition workshops were conducted by district personnel for all parents.

The skills to be introduced during training were divided into seven areas following Durrell's (11) hierarchy of teaching letter names (see Appendix E): matching letters directly, identifying letters shown, identifying letters named, and writing letters from dictation. A test for each area was developed and administered at the beginning and end of each incentive schedule every four weeks (See Appendix F). Approximately every four weeks training progressed to a new skill area, so that by the end of the project, training in all skill areas was completed. Special individualized instruction was given by project aides to those children having difficulty in

order to keep them at the same level as the other children. Charting of the progress of each child was maintained with precision teaching charts so that children dropping behind were quickly identified.

Incentive Delivery System

Parents

Of the four schools, parents of students in two schools were provided with cash incentive. That is, if they attended the Monday session, they were paid five dollars. If they participated on Monday and Tuesday, they were paid ten dollars weekly. If they did not attend, no incentive was given. Parents in the other two schools were not provided any monetary incentive.

Child Incentive

The incentive system for children was set up in a progressive manner. Children in two schools were in the incentive system. The study was designed so that for every four weeks, there would be a subskills test (pre and post) and a different incentive plan. Four basic steps were taken in moving children from immediate physical gratification to a socially motivated incentive system. These steps were as follows:

First Four Weeks - Matching Letters

1. Immediate reinforcement - items such as candy, cereal, etc. were given immediately for accomplished short-term tasks.

Second Four Weeks - Identifying Letters Shown

2. Delayed reinforcement - candy was given on a point type system at intervals for accomplished tasks.

Third Four Weeks - Identifying Letters Named

3. Delayed reinforcement - material rewards such as toys were exchanged for points instead of candy at spaced intervals.

Fourth Four Weeks - Naming and Writing Letters from Dictation

4. Social reinforcement - praise was given at appropriate points. Children accomplished tasks for the "good of the group". Those who finished first assisted slower children until the entire group had accomplished a task. Field trips were also included as a social reward.

Children in the other two groups did not receive any incentive other than the normal teacher and parent praise.

Research Design

Each of the four schools were to follow the same type of reading readiness program. The teacher aides, who would work with parents, and the classroom teachers received the same pre-session training. Each of the four schools served as one incentive system:

Franklin School - Incentives to child and parents

Irving School - Incentives to parents

Lehi School - Incentives to child only

Lincoln School - No incentives

To evaluate results by ethnic groups achievement and incentive delivery system, a 2 x 4 factorial design was used with raw test data.

A 3 x 4 design was utilized to assess the achievement effect of motivational style and incentive delivery system. A 2 x 3 x 4 design was planned but had to be abandoned because of a lack of sufficient numbers in the various cells.

In an effort to assess the retention of any achievement noted in February, an alternate test, the Murphy-Durrell Reading Readiness Analysis Test was administered to all kindergarten children in the school district in May for comparison to the preschool children not in the program.

DATA ANALYSIS

The first question investigated was:

Is there a statistical significant difference in intelligence scores as related to the motivational style of the subjects and the incentive delivery system?

The Haywood Picture Motivation Scale (23) was administered to the 121 subjects in the study. Of this group, 33 subjects (19 Anglo, 14 non-Anglo) were judged to be intrinsically motivated, 63 subjects (45 Anglo, 18 non-Anglo) were mixed and did not demonstrate either intrinsic or extrinsic motivational patterns, and 25 subjects (21 Anglo, 4 non-Anglo) were rated as being extrinsically motivated.

The motivational styles will be referred to as I-intrinsic, E-extrinsic, and M-mixed or no preference. The incentive delivery systems will be referred to as CH-Parent (incentives given to child

and parent); Parent (only parents received incentives); None (no incentives given to child or parents), and CH (incentives given to child only).

To assess the change in intelligence, the Peabody Picture Vocabulary Test Form A served as the covariate, and the Peabody Picture Vocabulary Test Form B was the dependent variable in the analysis of covariance presented in Table 1.

Table 1. Analysis of Covariance for Peabody Picture Vocabulary Test Scores

Source	S.S.	df	MS	F
Motivational Levels	207.562	2	103.781	0.736
Incentive Group	91.856	3	30.619	0.217
M.L. x I.G.	2274.383	6	379.064	2.690*
Error	5219.280	108	140.919	

* $p < .05$

There were no statistical significant differences between motivational style or incentive delivery systems. There was an interaction effect, however, and to locate the differences, the Scheffé "a posteriori" comparison method (12) was utilized with adjusted means. The analysis by incentive system and by motivational style is presented in Tables 2 and 3 respectively which are on the following page.

Table 2. Peabody Picture Vocabulary Test by Incentive Groups by the Scheffé Method

Incentive Groups	Incentive Group Favored	F
Ch-Parent - Parent	Parent	0.030
Ch-Parent - Child	Child	0.180
Ch-Parent - None	None	0.436
Parent - Child	Child	0.066
Parent - None	None	0.237
Child - None	None	0.044

There was no statistical significant difference, however, the no incentive groups had a higher adjusted mean score; the child incentive group had a higher adjusted mean than the parent or CH-parent group; the parent incentive group had a higher adjusted mean than the CH-parent group.

Table 3. Peabody Picture Vocabulary Test by Motivational Style by the Scheffé Method

Motivational Style	Motivational Style Favored	F
I-M	M	1.152
I-E	E	0.302
M-E	M	0.132

Although there was no statistical significant difference located, the mixed motivational style had a higher adjusted mean score than the intrinsic or extrinsic subjects. The extrinsic group had a higher adjusted mean than the intrinsic group.

The second question was:

Is there a statistical significant difference between motivational style and the incentive delivery system on reading readiness achievement?

To assess the motivational style and achievement by incentive system, the Peabody Picture Vocabulary Test Form B was used as the covariate, and the post-test scores of the visual discrimination section of the Clymer-Barrett Pre-Reading Battery was the dependent variable in the analysis of covariance as presented in Table 4.

Table 4. Analysis of Covariance for Clymer-Barrett Pre-Reading Battery, Visual Discrimination Subtest

Source	S.S.	df	MS	F
Motivational Styles	85.092	2	42.546	0.453
Incentive Groups	1183.640	3	394.547	4.205**
M.L. x I.G.	866.981	6	144.497	1.540
Error	10132.624	108	93.821	

**p < .01

There was a statistical significant difference noted by incentive groups, and there was no statistical significant difference by motivational style nor was there an interaction effect. The Scheffé "a posteriori" comparison method was utilized with adjusted means to locate the difference by incentive groups and is shown in Table 5 on the following page.

Table 5. Clymer-Barrett Pre-Reading Battery Visual Discrimination Test by Incentive Group by the Scheffé Method

Incentive Groups	Incentive Group Favored	F
Ch-Parent - Parent	Parent	9.310*
Ch-Parent - Child	Child	20.849**
Ch-Parent - None	None	6.177
Parent - Child	Child	2.107
Parent - None	Parent	0.968
Child - None	Child	6.757

* $p < .05$ ** $p < .01$

The parent incentive group and the child incentive group performed statistically significantly better than the child and parent incentive group. The child incentive group had a higher adjusted mean score than any other group. No other statistical significant differences existed.

Table 6. Analysis of Covariance for Clymer-Barrett Pre-Reading Battery Auditory Discrimination Test

Source	S.S.	df	MS	F
Motivational Styles	6.431	2	3.216	0.034
Incentive Groups	857.794	3	285.931	3.063*
M.L. x I.G.	149.345	6	24.891	0.267
Error	10083.214	108	93.363	

* $p < .05$

Table 6 shows the analysis of covariance for the auditory discrimination subtest of the Clymer-Barrett Pre-Reading Battery which was used as the dependent variable, and the Peabody Picture Vocabulary Test Form B was utilized as the covariate.

There was no statistical significant difference by motivational style nor was there an interaction effect. There was a statistical significant difference by incentive groups and the Scheffé "a posteriori" technique was conducted to locate the difference which is shown in Table 7.

Table 7. Clymer-Barrett Pre-Reading Battery Auditory Discrimination by Incentive Groups by the Scheffé Method

Incentive Groups	Incentive Group Favored	F
Ch-Parent - Parent	Ch-Parent	2.696
Ch-Parent - Child	Child	3.965
Ch-Parent - None	None	2.753
Parent - Child	Child	14.148**
Parent - None	None	12.877**
Child - None	Child	0.281

**p < .01

The child incentive and the no-incentive group performed statistically significantly better than the parent incentive group. There were no other statistical significant difference noted although the child incentive group had a higher adjusted mean than the no-incentive group.

The third question was:

Is there a statistical significant difference between motivational style and the incentive delivery system on reading readiness subskill achievement?

To assess the motivational style on achievement with different incentive delivery systems on reading subskills, four non-standardized pre and post-test were administered when the incentive delivery system changed every four weeks. The pre-test of each of the four tests was used as the covariate, and the post-test was used as the dependent variable in an analysis of covariance. Each analysis is presented in Tables 8, 9, 10, and 11.

Table 8. Analysis of Covariance for Matching Letters

Source	S.S.	df	MS	F
Motivational Styles	2.678	2	1.339	0.535
Incentive Groups	4.547	3	1.516	0.606
M.L. x I.G.	5.850	6	0.975	0.390
Error	270.104	108	2.502	

Table 9. Analysis of Covariance for Letter Names

Source	S.S.	df	MS	F
Motivational Styles	71.810	2	37.405	1.573
Incentive Groups	102.827	3	34.276	1.441
M.L. x I.G.	69.672	6	11.612	0.488
Error	2568.190	108	23.780	

Table 10. Analysis of Covariance for Letter Sounds

Source	S.S.	df	MS	F
Motivational Styles	105.010	2	52.505	0.770
Incentive Groups	140.936	3	46.979	0.689
M.L. x I.G.	104.820	6	17.470	0.256
Error	7365.508	108	68.199	

Table 11. Analysis of Covariance for Letter (Name) Writing

Source	S.S.	df	MS	F
Motivational Levels	38.889	2	19.444	0.466
Incentive Groups	126.554	3	42.185	1.011
M.L. x I.C.	195.573	6	32.595	0.781
Error	4507.191	108	41.733	

As indicated in Tables 8-11, there was no statistical significant difference in achievement on reading subskills by motivational style or incentive delivery systems. There was no interaction effect.

The fourth question was:

Is there a statistical significant difference between ethnic groups and the incentive delivery system on reading readiness achievement?

The analysis of covariance was used with the Clymer-Barrett Pre-Reading Battery Visual Discrimination Sub-Test as the dependent variable and the Peabody Picture Vocabulary Test Form B as the covariate and is shown in Table 12.

Table 12. Analysis of Covariance for Clymer-Barrett
Pre-Reading Battery Visual Discrimination Sub-Test

Source	S.S.	df	MS	F
Ethnic Groups	76.794	1	76.794	0.768
Incentive Groups	1269.868	3	423.289	4.232**
E.G. x I.G.	337.966	3	112.655	0.342
Error	11201.939	112	100.017	

**p < .01

Table 12 above indicates no statistical significant difference by ethnic groups but does show a statistical significant difference by incentive groups. There was no interaction effect. To locate the difference noted, the Scheffé "a posteriori" method was used and is presented in Table 13.

Table 13. Clymer-Barrett Pre-Reading Battery Visual Discrimination
Test by Incentive Groups by the Scheffé Method

Incentive Groups	Incentive Group Favored	F
Ch-Parent - Parent	Ch-Parent	0.154
Ch-Parent - Child	Ch	0.653
Ch-Parent - None	None	7.158
Parent - Ch	Ch	1.542
Parent - None	None	10.379*
None - Ch	None	3.551

*p < .05

Table 13 indicates a statistical significant difference in favor of the no-incentive group over the parent incentive group. The no-incentive group had a higher adjusted mean than any other group. There were no other statistical differences located.

The analysis for the Clymer-Barrett Pre-Reading Battery Auditory Discrimination Sub-Test was conducted with this test as the dependent variable and the Peabody Picture Vocabulary Test, Form B as the covariate and is presented in Table 14.

Table 14. Analysis of Covariance for Clymer-Barrett Pre-Reading Battery, Auditory Discrimination Sub-Test

Source	S.S.	df	MS	F
Ethnic Groups	32.540	1	32.540	0.364
Incentive Groups	591.764	3	197.255	2.204
E.G. x I.G.	379.849	3	126.616	1.415
Error	10022.955	112	89.491	

Considering ethnic groups versus incentive delivery without motivational style, there was no significant difference by ethnic groups, incentive groups, nor was there an interaction effect.

The fifth question was:

Is there a statistical significant difference between ethnic groups and the incentive delivery system on reading readiness subskill achievement?

The reading subskills investigated were matching letters, letter recognition, letter names, and letter writing. In each analysis, the pre-test score for that skill served as the covariate

and the post-test score for each skill was the dependent variable in an analysis of covariance. The analysis for matching letters is presented in Table 15 below.

Table 15. Analysis of Covariance for Matching Letters

Source	S.S.	df	MS	F
Ethnic Groups	11.761	1	11.761	4.945*
Incentive Groups	6.120	3	2.040	0.858
E.G. x I.G.	4.315	3	1.438	0.605
Error	226.364	112	2.378	

* $p < .05$

As indicated in Table 15, there was a statistical significant difference by ethnic groups. There was no statistical significant difference by incentive system nor was there an interaction effect.

To locate the differences noted, the Scheffé "a posteriori" method was utilized with adjusted means. The critical ratio for the .01 level of confidence was 6.84, the Scheffé comparison indicated an F of 6.907. This is statistically significant at the .01 level in favor of the non-Anglo ethnic group. The analysis for letter recognition is presented in Table 16 which appears on the following page.

There was no statistical significant difference by ethnic group or by incentive groups nor was there an interaction effect. The analysis of covariance for letter names is shown in Table 17 which is also on the following page.

Table 16. Analysis of Covariance for Letter Skills

Source	S.S.	df	MS	F
Ethnic Groups	101.610	1	101.610	1.600
Incentive Groups	101.165	3	33.722	0.531
E.G. x I.G.	228.174	3	76.058	1.197
Error	7113.618	112	63.514	

Table 17. Analysis of Covariance for Letter Name Skills

Source	S.S.	df	M.S.	F
Ethnic Groups	2.260	1	2.260	0.099
Incentive Groups	313.466	3	104.489	4.592**
E.G. x I.G.	157.712	3	52.571	2.310
Error	2548.689	112	22.756	

**p < .01

Although there was no statistical significant difference between ethnic groups, and no interaction effect, the above table indicates a statistical significant difference between incentive groups at the .01 level. Since a significant difference was noted between the four incentive groups, the Scheffé "a posteriori" comparison method was utilized to determine where the difference was located. This analysis is presented in Table 18 which is on the following page.

Table 18. A Comparison of Letter Names Skills by Schools
by the Scheffé Method

Incentive Groups	Incentive Group Favored	F
Ch-Parent - Parent	Parent	8.358*
Ch-Parent - Child	Child	16.182**
Ch-Parent - None	None	0.444
Parent - Child	Child	1.304
Parent - Parent	Parent	6.743
None - Child	Child	15.115**

*P < .05 **P < .01

As shown in Table 18 above, the child incentive group showed a statistical significant difference over all incentive groups except the parent only group. The parent only group scored significantly better than the child and parent group.

The analysis of covariance for letter writing skills is illustrated in Table 19.

Table 19. Analysis of Covariance for Letter Name Writing Skills

Source	S.S.	df	MS	F
Ethnic Groups	100.419	1	100.419	2.340
Incentive Groups	63.298	3	21.099	0.492
E.G. x I.G.	9.519	3	3.173	0.074
Error	4807.156	112	42.921	

In this analysis there was no statistical difference located, and there was no interaction effect.

The sixth question was:

Is there a statistical significant difference with parental attendance behavior between those receiving incentives and those not receiving incentives?

Table 20 illustrates the attendance pattern of parents, and the number of times parents attended the training sessions by incentive system.

Table 20. Parent Attendance by Incentive System

Days Attended	Incentive Systems			
	Parent/Child	Parent	Child	None
0-3	1	3	10	12
4-6	1	2	4	5
7-9	0	0	3	4
10-13	2	2	0	4
14-17	0	2	3	1
18-21	0	3	0	2
22-25	0	3	0	2
26-29	2	3	1	0
30-32	0	1	0	1
TOTAL	6	19	21	31

In order to evaluate the significance by incentive groups and parental attendance, the following formula by Garrett (17) was used:

$$SE\% = \frac{PQ}{N}$$

P = the percent occurrence of the observed behavior;

Q = (1-P), and N is the size of the sample.

The procedure used in testing the difference of the two groups was to consider P^1 and P^2 as being independent determinations of the common population parameter, P^1 and to estimate P by probing P^1 and P^2 with the pooled estimate of P being obtained from the following equation:

$$P = \frac{N^1 p^1 + N^2 p^2}{N^1 + N^2}$$

In computing the participation percentage of the parent incentive groups with the percentage of participation of the non-parental incentive groups, the critical ratio of 5.087 was obtained. The T Table indicates that the CR at the .05 level and .01 level is 2.00 and 2.38 respectively. This indicates that there was statistically significantly greater parental participation at incentive sites than at non-incentive sites. Table 21, on the following page, indicates a breakdown of attendance by parents by incentive systems.

Table 21. Parental Attendance by Incentive System

Incentive System	Parents Able To Attend	Possible Days	Attendance	Avg. Attendance By Percent
Child/Parent	6	32	81	42%
Parent	19	32	311	51%
Child	23	32	165	22%
None	31	32	255	25%

Parental attitude concerning various factors of the study was also investigated. In an effort to arrive at a consensus of opinion the Leik (28) procedure was utilized for each incentive system. Complete copies of the questionnaires can be found in Appendix G. The results of the questions common to all questionnaires are presented in Table 22 which appears on the following page.

Table 22. Consensus of Parental Opinion by Incentive System

QUESTIONS	INCENTIVE SYSTEM			
	Parent/Child	Parent	Child	None
1	.75	.83	1.00	.71
2	1.00	.75	no response	.59
3	.93	.93	.88	.83
4	.75	.60	.79	.60
5	.80	.39	.93	.63
6	.80	.42	.85	.76
7	.67	.78	.81	.65
8	.73	.84	.57	.76
9	.87	.88	.63	.51
10	.77	.92	.82	.53
11	.75	.82	.81	.61
12	.80	.77	.62	.55
13	.61	.86	.28	.44
14	.33	.45	--	--
15	.68	--	--	--
16	.60	--	.48	--
17	.78	.88	.64	.54
18	.93	.98	.92	.70
19	.50	.52	.62	.53
20	.20	1.00	.90	.74

An index of consensus of .50 and above will be considered a consensus of opinion for each parental group; an index of .40 to .50 will be considered a moderate consensus; and an index below .40 will be considered a low consensus of opinion. A blank slot in Table 22 indicates that the questions were not asked of that group. Based upon these judgments, the consensus indicates that parents feel that ---

- the training sessions by the psychologist were helpful in aiding their understanding of early childhood problems and the importance of communication.
- the training in health and diet practices was helpful.
- the reading skill games were helpful in aiding their child to gain the necessary pre-reading skills.
- the training with the pre-reading games helped in their understanding of the skills necessary to prepare for formalized reading.
- the work in the classroom gave them a better understanding of classroom and school practices. The parent only incentive group had a consensus index of .39 even though 13 parents indicated it helped very much, and 5 parents indicated not at all.
- the participation in classroom procedures with the teacher present resulted in their feeling more comfortable with the teacher and teachers in general.
- the use of bi-lingual aides was helpful in enhancing the effectiveness of the program.
- they would attend a similar type program if it were offered again.
- this type of program should be repeated and expanded to include more parents over a greater length of time.
- the program helped their children in school as compared to the gain they would have made without this program.

- philosophically, they favor the use of incentives for children.
- philosophically, they favor the use of incentives for parents with the exception of the child incentives only school where the index of consensus was .28.
- at the two incentives sites, the parent incentive group indicated that incentives were effective in helping parents attend regularly, although the index of consensus at the child/parent incentive site was .33.
- incentives were effective in helping their children in school at the parent-child incentive sites. This question was not asked at the other sites.
- they use the incentive idea with their children at home.
- they would like to be involved in a program of this type that followed their children's progress throughout the primary grades.
- the meeting place for parent training (at the school) was appropriate.
- the time of day met with their approval.
- transportation was not a problem. The child/parent incentive site had an index of consensus of .20. Out of five parents who responded, two indicated it was a problem (great extent), and one stated it was quite a problem while two indicated it was no problem at all.

RETENTION ANALYSIS

The seventh question was:

Is there a statistical significant difference on the retention of reading skills between the four groups of low socio-economic level children and four groups of middle socio-economic level children after a three months' lapse of time?

The Murphy-Durrell Reading Readiness Analysis was the instrument utilized to assess the retention aspect of the study. Four non-Title I schools were randomly selected from a pool of 16 schools to compare with the four Title I schools involved in the study. A one-way analysis of variance was conducted between the two groups of schools and is presented in Table 23.

Table 23. Analysis of Variance for Murphy-Durrell Reading Readiness Analysis

Source	df	MS	F
Schools	231	521.024	
Groups	1	158.897	0.304
Error	230	522.600	

As illustrated above, there was no statistical significant difference between the two groups of schools. In an effort to determine if any of the experimental schools performed better than any of the control schools, an analysis of variance was conducted with the same test by individual school. This analysis is presented in Table 24 on the following page.

Table 24. Analysis of Variance for Murphy-Durrell Reading Readiness Analysis by Individual School

Source	df	MS	F
Schools	231	521.024	
Ind. Schools	7	2401.655	5.196*
Error	224	462.255	

* $P < .01$

There was a statistical significant difference between the schools. To locate the differences, the Scheffé "a posteriori" was conducted, and the results are presented in Table 25.

Table 25. Individual Schools by the Scheffé Method

School	School Favored	F
Franklin-Irving	Irving	6.548
Franklin-Lehi	Lehi	11.242
Franklin-Lincoln	Franklin	2.221
Franklin-Hale	Hale	7.287
Franklin-Webster	Webster	2.60
Franklin-Holmes	Holmes	0.351
Franklin-Whittier	Whittier	0.476
Irving-Lehi	Lehi	0.630
Irving-Lincoln	Irving	16.395*
Irving-Hale	Hale	0.020
Irving-Webster	Irving	0.896

Table 25. Individual Schools by the Scheffé Method (cont'd)

School	School Favored	F
Irving-Holmes	Irving	3.876
Irving-Whittier	Irving	3.493
Lehi-Lincoln	Lehi	23.455**
Lehi-Hale	Lehi	0.427
Lehi-Webster	Lehi	3.030
Lehi-Holmes	Lehi	7.620
Lehi-Whittier	Lehi	7.090
Lincoln-Hale	Hale	17.552*
Lincoln-Webster	Webster	9.625
Lincoln-Holmes	Holmes	4.337
Lincoln-Whittier	Whittier	4.754
Hale-Webster	Hale	1.182
Hale-Holmes	Hale	4.439
Hale-Whittier	Hale	4.037
Webster-Holmes	Webster	1.040
Webster-Whittier	Webster	0.850
Holmes-Whittier	Whittier	0.010

*P < .05 (CR 14.35) **P < .01 (CR 19.11)

The results by school indicate that of the four original Title I schools involved, Irving, Lehi, and Franklin Schools had higher mean scores than did Lincoln School. Irving and Lehi Schools had statistical significant differences, .05 and .01

respectively, better than Lincoln School. All four non-Title I schools had higher mean scores than Lincoln School with Hale School having a statistical difference at the .05 level.

Compared to past performance of the four Title I schools, the percentage of students entering first grade ready to read (Quartile A and B¹ on Murphy-Durrell Reading Readiness Analysis Test) was dramatically reversed for Irving and Lehi Schools. The past (1970 and 1971) and present (1972) results are presented in Table 26.

Table 26. Percentage Comparisons of Past and Present Students Ready to Begin a Formalized Reading Program

Schools	Past Performance	Present Performance
Franklin	37%	35%
Irving	18%	91%
Lehi	29%	87%
Lincoln	36%	40%
DISTRICT	49%	74%

The above table indicates that Irving and Lehi achieved higher than the district average even though they were considerably lower in the past. Franklin and Lincoln Schools did not perform equal to district scores.

RESULTS

The objectives of the study sought information relevant to seven questions. The data analysis indicated the following results for each question.

1. Is there a statistical significant difference in intelligence scores as related to the motivational style of the subjects and the incentive delivery system?

When pre-test intelligence scores are held constant, there was an interaction effect. There was no located statistical significant difference between motivational style and incentive system on the improvement of intelligence scores. The no-incentive group had a higher mean score than the other incentive groups, and the mixed motivational group had a higher mean score than the intrinsically or extrinsically motivated groups.

2. Is there a statistical significant difference between motivational style and the incentive delivery system on reading readiness achievement?

There was a statistical significant difference between incentive systems but no significant difference between motivational style on the improvement of reading readiness skills.

The parent and the child incentive groups performed statistically better than the other incentive systems on the visual discrimination test. The child incentive group had a higher mean

than the other groups.

The child and the no-incentive group performed statistically better than the other incentive groups on the auditory discrimination test. Once again, the child incentive group had a higher mean score than the other groups.

3. Is there a statistical significant difference between motivational style and the incentive delivery system on reading readiness subskill achievement?

There was no statistical significant difference between between motivational styles and incentive systems on the reading readiness subskills.

4. Is there a statistical significant difference between ethnic groups and the incentive delivery system on reading readiness achievement?

When ethnic groups are utilized, the no-incentive group performed statistically better than the parent incentive groups on the visual discrimination test. There was no statistical significant difference on the auditory discrimination test by ethnic group or by incentive system.

5. Is there a statistical significant difference between ethnic groups and the incentive delivery system on reading readiness subskill achievement?

There was a statistical significant difference between ethnic groups on the matching letters subtest. The non-Anglo group performed statistically better than the Anglo group.

There was no statistical significant difference between ethnic groups or incentive systems on the letter recognition test or on the letter writing test.

On the letter naming test, the child incentive group performed statistically better than the child/parent and the no-incentive group. The parent group did significantly better than the child/parent group.

6. Is there a statistical significant difference with parental attendance behavior between those receiving incentives and those not receiving incentives?

There was a statistical significant difference between parents who did receive incentives and those that did not. The parent group receiving incentives attended training sessions a greater number of times than those parents who did not receive incentives.

7. Is there a statistical significant difference on the retention of reading skills between the four groups of low socio-economic level children and four groups of middle socio-economic level children after a three months' lapse of time?

There was no statistical significant difference between the four experimental Title I schools and the four non-Title I schools on the end-of-year reading readiness test.

CONCLUSIONS

Within the limitations of the study and based upon the validity and reliability of the instruments utilized, the data appears to support the following conclusions:

1. There was no identified statistical significant difference on the improvement of intelligence scores regardless of the child's motivational style or the incentive system utilized.
2. When intelligence is held constant, there was a statistical significant difference by incentive system on the Clymer-Barrett Pre-Reading Battery (short form). The parent and the child incentive groups performed significantly better than the child/parent incentive groups on the visual discrimination test. On the auditory discrimination test, the child and the no-incentive group performed significantly better than the parent group. There was no statistical significant difference by motivational style.
3. When intelligence is held constant, there was no statistical significant difference between incentive systems or motivational style groups on the

informal reading readiness subskill tests.

4. There was no statistical significant difference between ethnic groups when intelligence is held constant on the Clymer-Barrett Pre-Reading Battery (short form). There was a statistical significant difference by incentive systems on the visual discrimination subtest. ~~The~~ no-incentive group performed significantly better than the parent incentive group. There was no statistical difference between incentive groups on the auditory discrimination test.

5. When intelligence is held constant, there was a statistical significant difference between ethnic groups on the informal reading readiness subskill test of matching letters. The non-Anglo group performed significantly better than the Anglo group. There was no other statistical difference between ethnic groups on the subskill tests. There was a statistical significant difference by incentive groups on the letter naming subskill test. The child incentive group performed significantly better than the child/parent and the no-incentive groups. The parent incentive

group performed statistically better than the child/parent incentive group.

6. The parent group receiving incentives demonstrated greater attendance behavior (.01) than those parents who did not receive incentives.
7. There was no statistical significant difference between the four represented Title I Schools and the four non-Title I Schools on the Murphy-Durrell Reading Readiness Analysis Test.

DISCUSSION

Caution must be exercised in the interpretation of this data for two main reasons:

- 1) The parents at the parent/child incentive site numbered only two. On the visual discrimination subtest of the Clymer-Barrett Pre-Reading Battery, two groups had significant results superior to the parent/child group. Not only were there only two parents involved, but not the same two parents attended each session.
- 2) The Haywood Picture Motivation Scale Test is new and has not had the extensive exposure to researchers as have published standardized tests.

The fact that the child incentive groups had significant difference between each other, and that there was no statistical significant difference between child incentive groups and the non-incentive groups tends to support the notion that incentives is not the critical variable to improve achievement. Likewise, motivational style did not affect achievement on any measure as shown by the Haywood Picture Motivation Scale Test. The only analysis that had an interaction effect was concerning the improvement of intelligence scores. In this analysis, the mixed motivational style group had a higher mean score than the intrinsic or extrinsic motivated groups.

The significant aspect of the study is that low socio-economic level children can learn the ~~critical~~ readiness skills as well as their middle socio-economic level counterparts, and material incentives are not needed to accomplish the task. This is supported by the fact that there was no statistical significant difference in achievement between the four Title I schools and the four non-Title I schools. Historically, the Title I schools included in the study scored the lowest on the Murphy-Durrell Reading Readiness Analysis Test of the twenty schools in the district. The fact that two Title I schools reversed the ready/not ready to read percentage is historical in this community.

The suspected reason the two other Title I schools did not achieve similar dramatic results is twofold:

- 1) At one site the teachers involved were more socially oriented than being concerned with reading readiness skills.
- 2) The remaining site had a new inexperienced teacher who was preoccupied with just operating a classroom. At both sites, the teachers are now following the program plan for the study. This change in teacher behavior can be attributed to this study.

An interesting finding was that the schools with the greatest achievement had more parental participation. Incentives did make a difference on the attendance pattern of parents. Initially, there was no attendance pattern difference between the four schools. As the project progressed, the parent incentive groups maintained their involvement but the non-parent incentive groups decreased in attendance behavior. The incentive probably influenced parents to prioritize their time as they were more consistent in their attendance than the non-incentive parents.

In summary, parental incentives are effective to maintain attendance at training sessions. Material type child incentives are apparently not needed to accelerate the achievement of low socio-economic level children. Assessing motivational style had no significant effect on achievement but could be important information for teacher classroom management techniques. The most significant factor continues to be the teacher-pupil relationship and teacher competencies. The implication is by assuring teacher

competencies, the child's achievement would be greatly enhanced. Additional research into this area would be more critical than other incentives projects on the acquisition of reading readiness skills of disadvantaged children.

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APPENDIX A

INDIVIDUAL TEST SCORES BY SCHOOLS

APPENDIX B

A SYNOPSIS OF AIDE ACTIVITIES

AIDES HANDOUT

I. SYNOPSIS OF THE STUDY: The present project intends to measure the effect of incentives on the acquisition of reading readiness skills that are normally taught to kindergarten children in Mesa Elementary schools. Incentives will also be offered to parents of these children to induce them to participate in and more fully understand the training being given to their children. The objectives of the study include:

- A. To determine if preschool children are extrinsically motivated (EM) or intrinsically motivated (IM).
- B. To determine if incentives are effective for the acquisition of reading readiness skills of children from minority backgrounds.
- C. To determine if incentives given to parents are more effective than not on their attendance at parent training sessions.

II. SCHEDULE OF EVENTS - (General)

- A. First week (Sept. 7-10)
 1. Interviewing of parents
 2. Training in testing skills
- B. Second week
 1. Testing of children
 2. Training in skill areas
- C. Third week and thru project
 1. Parent training
 2. Parent interviews
 3. Work in the classroom

III. SCHEDULE OF EVENTS - (Specific)

- A. Parent interviews
 1. A questionnaire will be provided
 2. Initial interview
 3. One to one interviews each week after this

B. Parent Training

1. Once a week aides will train parents in a group in the skill to be taught in the classroom the following week.
2. Once a week the aide will assist the parents in the classroom in teaching children the skill that is currently being worked on.
3. It will be the aides responsibility to handle parent problems in teaching skills, not the regular classroom teacher.

C. Aide Training

1. Each week the aides will receive training in the skill to be taught to parents and children in the classroom.
2. This training will be conducted by Dr. Douglas Barnard or another of the project's professional consultants.
3. TESTING:
 - a. Peabody Picture Vocabulary Test
 - b. Picture Motivation Scale (IM & EM)
 - c. Clymer-Barrett Readiness Test
 - d. Testing will be done at places provided by the schools.
 - e. Any sign of child frustration or emotional upset noted while testing will immediately terminate the testing session.
 - f. Approximately every four weeks re-testing and a new incentive system will be instituted.

D. SCHOOLS - The participating schools will be:

1. Franklin Elementary School
245 East Main Street (962-7180)
2. Lincoln Elementary School
930 South Sirrine (962-7271)
3. Irving Elementary School
155 North Center (962-7671)
4. Lehi Elementary School
2345 North Horne (962-7161)

- E. An aide will work at one of these four schools throughout the study in order to become most familiar with that school's personnel and method of operation.

F. Aides will be introduced to personnel they will be working with.

IV. GENERAL INFORMATION

- A. Aide pay will be \$2.00 per hour
- B. Aides will work 6 hrs. a day, five days a week.
- C. During school operation aides' hours will coincide basically with school hours.
- D. Aides will be reimbursed at the rate of 10¢ per mile for transportation in their cars directly connected with performance of their duties.

Abstract

QUESTIONS AND ANSWERS FROM IMPLEMENTATION TRIALS

PARENT QUESTIONNAIRE

"Incentives Only" Project

This questionnaire has been prepared to determine your likes and dislikes in certain areas involved with the "Incentives Only" Project currently in progress at your child's school. For the first two questions would you place a number (1-4) in each of the blanks beside the questions showing your preference for each choice. The numbers 1-4 correspond to the following preferences:

- 1 - Would like the most
- 2 - Would like somewhat
- 3 - Would not care
- 4 - Would like the least

1. As an incentive for participating in the program, I would like:

	1st	2nd	3rd	4th
_____ (a) Green Stamps		1	2	2
_____ (b) Money	8	2	2	
_____ (c) Tickets to the movies for my child	3	3	2	
_____ (d) Tickets to the zoo for my child	7	2		
_____ (e) Tickets to the movies for myself	2	2	1	1
_____ (f) Other (comment) _____	2			

2. While participating in the parent training portion of the program, I would

prefer to meet:

	1st	2nd	3rd	4th
_____ (a) At home with a group of other parents in the program.		1		
_____ (b) At a central location in the neighborhood with a group of other parents in the program.	2			
_____ (c) At the Center for Educational Advancement on Main Street, Mesa.	1	1		
_____ (d) At my child's school with other parents in the program.	22			
_____ (e) At some other location. (Comment) _____				

In question 3, rate the three days for parent participation in classroom instruction (Monday, Tuesday or Wednesday) in order of preference. Number 1 being the most preferred day, 2 the next preferred, 3 the least preferred, and 4 if that day is not possible for attendance.

3. Of the days available for participating in classroom instruction (Monday,

Tuesday and Wednesday) my order of preference would be:

	1st	2nd	3rd	4th
<u> </u> (a) Monday	3		4	
<u> </u> (b) Tuesday	7	4		1
<u> </u> (c) Wednesday	9	2		1

For the last five questions simply place an X in the appropriate space.

4. Parent training will occur approximately once a week. I will be available for this training:

 6 (a) All the time

 12 (b) Most of the time

 4 (c) Sometimes

 1 (d) Very little

 (e) Never

5. While participating in the parent training I would prefer to attend:

 15 (a) In the morning

 6 (b) In the afternoon

6. Transportation:

 (a) I will have my own transportation

 (b) I will need to have transportation provided

7. Do you have TV in your home? 19 yes 3 no

8. Does your child watch "Sesame Street"? 18 yes 4 no

Ethnic Group: White 7
 Mexican 13
 Negro 2

QUESTIONNAIRE

"Incentives Only" Project

This questionnaire has been prepared to determine your likes and dislikes in certain areas involved with the "Incentives Only" Project currently in progress at your child's school. For the first two questions would you place a number (1-4) in each of the blanks beside the questions showing your preference for each choice. The numbers 1-4 correspond to the following preferences:

- 1 - Would like the most
- 2 - Would like somewhat
- 3 - Would not care
- 4 - Would like the least

1. As an incentive for participating in the program, I would like:

	1st	2nd	3rd	4th
_____ (a) Green Stamps	1	17	21	2
_____ (b) Money	8	8	23	2
_____ (c) Tickets to the movies for my child	20	9	11	2
_____ (d) Tickets to the zoo for my child	32	4	6	
_____ (e) Tickets to the movies for myself	3	9	20	7
_____ (f) Other (comment) _____	3		1	3

2. While participating in the parent training portion of the program, I would

prefer to meet:

	1st	2nd	3rd	4th
_____ (a) At home with a group of other parents in the program.	5	15	14	8
_____ (b) At a central location in the neighborhood with a group of other parents in the program.		23	19	
_____ (c) At the Center for Educational Advancement on Main Street, Mesa.		23	13	3
_____ (d) At my child's school with other parents in the program.	42	2		
_____ (e) At some other location. (Comment) _____			1	8

In question 3, rank the three days for parent participation in classroom instruction (Monday, Tuesday or Wednesday) in order of preference. Number 1 being the most preferred day, 2 the next preferred, 3 the least preferred, and 4 if that day is not possible for attendance.

3. Of the days available for participating in classroom instruction (Monday, Tuesday and Wednesday) my order of preference would be:

	1st	2nd	3rd	4th
<u> </u> (a) Monday	16	4	24	
<u> </u> (b) Tuesday	16	21	6	
<u> </u> (c) Wednesday	13	18	12	

For the last five questions simply place an X in the appropriate space.

4. Parent training will occur approximately once a week. I will be available for this training:

- 9 (a) All the time
- 26 (b) Most of the time
- 8 (c) Sometimes
- (d) Very little
- 1 (e) Never

5. While participating in the parent training I would prefer to attend:

- 28 (a) In the morning
- 21 (b) In the afternoon

6. Transportation:

- (a) I will have my own transportation
- (b) I will need to have transportation provided

7. Do you have TV in your home? 44 yes 1 no

8. Does your child watch "Sesame Street"? 38 yes 7 no

Ethnic Groups:

White	33
Mexican	12
Negro	-

Parenting Skills
 "Incentives Only" Project

This questionnaire has been prepared to determine your likes and dislikes in certain areas involved with the "Incentives Only" Project currently in progress at your child's school. For the first two questions would you place a number (1-4) in each of the blanks beside the questions showing your preference for each choice. The numbers 1-4 correspond to the following preferences:

- 1 - Would like the most
- 2 - Would like somewhat
- 3 - Would not care
- 4 - Would like the least

1. As an incentive for participating in the program, I would like:

	1st	2nd	3rd	4th
_____ (a) Green Stamps	2	4	5	7
_____ (b) Money	5	3	7	3
_____ (c) Tickets to the movies for my child	3	5	6	4
_____ (d) Tickets to the zoo for my child	9	3	4	2
_____ (e) Tickets to the movies for myself	1		7	10
_____ (f) Other (comment) _____	1			

2. While participating in the parent training portion of the program, I would prefer to meet:

	1st	2nd	3rd	4th	
_____ (a) At home with a group of other parents in the program.	5	5	5		
_____ (b) At a central location in the neighborhood with a group of other parents in the program.	5	5	4		
_____ (c) At the Center for Educational Advancement on Main Street, Mesa.	2	5	5		
_____ (d) At my child's school with other parents in the program.	5	5			
_____ (e) At some other location. (Comment) _____					

In question 3, rate the three days for parent participation in classroom instruction (Monday, Tuesday or Wednesday) in order of preference. Number 1 being the most preferred day, 2 the next preferred, 3 the least preferred, and 4 if that day is not possible for attendance.

3. Of the days available for participating in classroom instruction (Monday,

Tuesday and Wednesday) my order of preference would be:

	1st	2nd	3rd	4th
<u> </u> (a) Monday	5	2	8	3
<u> </u> (b) Tuesday	6	11		1
<u> </u> (c) Wednesday	5	4	7	2

For the last five questions simply place an X in the appropriate space.

4. Parent training will occur approximately once a week. I will be available for this training:

- 7 (a) All the time
- 8 (b) Most of the time
- 5 (c) Sometimes
- 1 (d) Very little
- (e) Never

5. While participating in the parent training I would prefer to attend:

- 12 (a) in the morning
- 6 (b) In the afternoon

6. Transportation:

- (a) I will have my own transportation
- (b) I will need to have transportation provided

7. Do you have TV in your home? 18 yes X no

8. Does your child watch "Sesame Street"? 14 yes 4 no

Ethnic Group: White 14
 Mexican 3
 Negro -
 Indian 1

Lehi

PARENT QUESTIONNAIRE

"Incentives Only" Project

This questionnaire has been prepared to determine your likes and dislikes in certain areas involved with the "Incentives Only" Project currently in progress at your child's school. For the first two questions would you place a number (1-4) in each of the blanks beside the questions showing your preference for each choice. The numbers 1-4 correspond to the following preferences:

- 1 - Would like the most
- 2 - Would like somewhat
- 3 - Would not care
- 4 - Would like the least

1. As an incentive for participating in the program, I would like:

	1st	2nd	3rd	4th
_____ (a) Green Stamps	1	2	2	4
_____ (b) Money	1	1	2	4
_____ (c) Tickets to the movies for my child		3	1	3
_____ (d) Tickets to the zoo for my child	4		3	3
_____ (e) Tickets to the movies for myself		1	2	6
_____ (f) Other (comment) _____	16			

2. While participating in the parent training portion of the program, I would

prefer to meet:
1st 2nd 3rd 4th

- _____ 9 14 _____ (a) At home with a group of other parents in the program.
- 11 9 1 _____ (b) At a central location in the neighborhood with a group of other parents in the program.
- 13 4 6 _____ (c) At the Center for Educational Advancement on Main Street, Mesa.
- 25 _____ 2 _____ (d) At my child's school with other parents in the program.
- _____ (e) At some other location. (Comment) _____

In question 3, rate the three days for parent participation in classroom instruction (Monday, Tuesday or Wednesday) in order of preference. Number 1 being the most preferred day, 2 the next preferred, 3 the least preferred, and 4 if that day is not possible for attendance.

3. Of the days available for participating in classroom instruction (Monday, Tuesday and Wednesday) my order of preference would be:

	1st	2nd	3rd	4th
____ (a) Monday	12	7	7	
____ (b) Tuesday	8	12	2	1
____ (c) Wednesday	4	4	9	6

For the last five questions simply place an X in the appropriate space.

4. Parent training will occur approximately once a week. I will be available for this training:

	1st	2nd	3rd	4th
____ (a) All the time	2			
____ (b) Most of the time	19			
____ (c) Sometimes	4			
____ (d) Very little				
____ (e) Never				

5. While participating in the parent training I would prefer to attend:

- 18 (a) In the morning
7 (b) In the afternoon

6. Transportation:

- ____ (a) I will have my own transportation
 ____ (b) I will need to have transportation provided

7. Do you have TV in your home? 23 yes 2 no

8. Does your child watch "Sesame Street"? 17 yes 8 no

Ethnic Group: White 25
 Mexican -
 Negro -

APPENDIX D

FOLLOW-UP INTERVIEW LETTERS TO PARENTS

MESA PUBLIC SCHOOLS 605 W. MAIN ST. MESA, ARIZONA 85201

TELEPHONE: AREA CODE 602 - 962-7162

September 22, 1971

Dear Parents:

As you know from the interviewer that contacted you recently, a project is under way at your child's school that is intended to help him/her improve the skills necessary for proper reading accomplishment. This program is unique in that it involves you, the parents, in the process. A child spends much more time away from school than in the classroom and much of his learning occurs at home under the influence of the parents. In order for parents to more fully participate in their child's education we have made available an opportunity for parents to take part in some of the actual classroom activity. In this way you may become more aware of what is actually going on in your child's classroom and be able to help him in various ways while he is at home.

The program of parent participation will begin on Monday September 27, in the Auditorium of your child's school. Mrs. Montano will be present at that time to go over some of the skills that will be taught during that week in the classroom. This session will begin at 9:00 a.m. and will last approximately two hours. In addition, for those parents who cannot make it in the morning, an identical session will be conducted in the afternoon beginning at 1:00 p.m. in the Teacher's Lounge. On the following day, Tuesday, September 28, at the beginning of your child's class (morning or afternoon), parents will meet at their child's classroom to participate in working with their child and other children using the skills and methods learned the previous day.

It will be necessary for you to attend both the training and classroom sessions to gain the full benefit of the program. If you can make just the training session, however, you are certainly welcome.

We encourage you not to bring other small children with you to the training or classroom sessions. However, we realize this may not always be possible and "babysitting" will be provided for children that are old enough to walk.

Incentives for parents will be offered in the form of money. Parents will receive \$10.00 per week if they attend both training and classroom sessions. If both sessions are not attended, no incentives will be offered.

It was very satisfying to find that so many parents were interested in this program. If you have any additional questions about the program they will be answered at the first training session or you may contact Mrs. Montano or Mr. Tom Healey at the Center for Educational Advancement - phone: 952-7226. We're looking forward to seeing you at the first meeting!

Appreciatively,

Thomas M. Healey

Mr. Thomas M. Healey

TWH/st

September 22, 1971

Dear Parents:

As you know from the interviewer that contacted you recently, a project is under way at your child's school that is intended to help him/her improve the skills necessary for proper reading accomplishment. This program is unique in that it involves you, the parents, in the process. A child spends much more time away from school than in the classroom and much of his learning occurs at home under the influence of the parents. In order for parents to more fully participate in their child's education we have made available an opportunity for parents to take part in some of the actual classroom activity. In this way you may become more aware of what is actually going on in your child's classroom and be able to help him in various ways while he is at home.

The program of parent participation will begin on Monday September 27, in Room 10 of your child's school. Mrs. Valocchi will be present at that time to go over some of the skills that will be taught during that week in the classroom. This session will begin at 9:00 a.m. and will last approximately two hours. In addition, for those parents who cannot make it in the morning, an identical session will be conducted in the afternoon beginning at 1:00 p.m. in Room 10. On the following day, Tuesday, September 28, at the beginning of your child's class (morning or afternoon) parents will meet at their child's classroom to participate in working with their child and other children using the skills and methods learned the previous day.

It will be necessary for you to attend both the training and classroom sessions to gain the full benefit of the program. If you can make just the training session, however, you are certainly welcome.

We encourage you not to bring other small children with you to the training or classroom sessions. However, we realize this may not always be possible and "babysitting" will be provided for children that are old enough to walk.

The answer will be offered to the children during training. The object of incentives is to move towards a system of incentives where the child will seek social approval and inner satisfaction rather than material things.

It was very satisfying to find that so many parents were interested in this program. If you have any additional questions about the program, they will be answered at the first training session, or you may contact Mrs. Valocchi or Mr. Tom Healey at the Center for Educational Advancement - Telephone 962-7226. We're looking forward to seeing you at the first meeting!

Appreciatively,

Thomas M. Healey
Mr. Thomas M. Healey

TMH/sc

September 22, 1971

Dear Parents:

As you know from the interviewer that contacted you recently, a project is under way at your child's school that is intended to help him/her improve the skills necessary for proper reading accomplishment. This program is unique in that it involves you, the parents, in the process. A child spends much more time away from school than in the classroom and much of his learning occurs at home under the influence of the parents. In order for parents to more fully participate in their child's education we have made available an opportunity for parents to take part in some of the actual classroom activity. In this way you may become more aware of what is actually going on in your child's classroom and be able to help him in various ways while he is at home.

The program of parent participation will begin on Monday September 27, in the Conference Room of the Media Center of your child's school. Miss Lira will be present at that time to go over some of the skills that will be taught during that week in the classroom. This session will begin at 9:00 a.m. and will last approximately two hours. In addition, for those parents who cannot make it in the morning, an identical session will be conducted in the afternoon beginning at 1:00 in the Media Center. On the following day, Tuesday, September 28, at the beginning of your child's class (morning or afternoon), parents will meet at their child's classroom to participate in working with their child and other children using the skills and methods learned the previous day.

It will be necessary for you to attend both the training and classroom sessions to gain the full benefit of the program. If you can make just the training session, however, you are certainly welcome.

We encourage you not to bring other small children with you to the training or classroom sessions. However, we realize this may not always be possible and "babysitting" will be provided for children that are old enough to walk.

If you need clarification or wish that we make changes were
involved in this program. If you have any additional ques-
tions about the program they will be answered at the first
training session or you may contact Miss Lisa or Mr. Tom Healey
at the Center for Educational Advancement - Telephone 958-7426.
We're looking forward to seeing you at the first meeting!

Appreciatively,

Thomas M. Healey
Mr. Thomas M. Healey

EMH/cc

September 22, 1971

Dear Parents:

As you know from the interviewer that contacted you recently, a project is under way at your child's school that is intended to help him/her improve the skills necessary for first reading accomplishments. This program is unique in that it involves you, the parents, in the process. A child spends much more time away from school than in the classroom and much of his learning occurs at home under the influence of parents. In order for parents to more fully participate in their child's education we have made available an opportunity for parents to take part in some of the actual classroom activity. In this way you may become more aware of what is actually going on in your child's classroom and be able to help him in various ways while he is at home.

The program of parent participation will begin on Monday, September 27, in the Music Room of your child's school. Mrs. Valensuela will be present at that time to go over some of the skills that will be taught during that week in the classroom. This session will begin at 9:00 a.m. and will last approximately two hours. In addition, for those parents who cannot make it in the morning, an identical session will be conducted in the afternoon, beginning at 1:00 p.m. in the Cafeteria. On the following day, Tuesday, September 28, at the beginning of your child's class (morning or afternoon), parents will meet at their child's classroom to participate in working with their child and other children using the skills and methods learned the previous day.

It will be necessary for you to attend both the training and classroom sessions to gain the full benefit of the program. If you can make just the training session, however, you are certainly welcome.

We encourage you not to bring other small children with you to the training or classroom sessions. However, we realize this may not always be possible and "babysitting" will be provided for children that are old enough to walk.

...the... of... in... the... of...
...the... of... in... the... of...
...the... of... in... the... of...
...the... of... in... the... of...
...the... of... in... the... of...
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...the... of... in... the... of...
...the... of... in... the... of...
...the... of... in... the... of...
...the... of... in... the... of...

We are very gratified to find that so many parents are
interested in this program. If you have any additional ques-
tions about the program they will be answered at the first train-
ing session or you may contact Mrs. Valenzuela or Mr. Tom Healey,
of the Center for Vocational Assessment, telephone 334-7226.
We're looking forward to seeing you at the first meeting.

Appreciatively,

Thomas W. Healey
Mr. Thomas W. Healey

TWL/st

APPENDIX E

SKILLS INTRODUCED DURING PROGRAM

LETTER NAME HIERARCHY SKILLS (11)

These are levels - hierarchy

1. Matching letters
2. Identify letters shown
3. Identify letters named
4. Name letters (individually)
5. Write letters from dictation

Letter Names

1. Match letters directly
write the following on the blackboard

M T C F M O

Ask the children which letter is like the M (to the left.) Have a child come and circle the letter. Do the same with other letters. Have the children do similar exercises at their seats.

2. Identify Letters shown
Hold up a card with a letter. Ask the children what letter it is. Have them circle the letter on their papers. (Card is held up in a timed situation) Continue with various letters.
3. Identify letters named
Say the name of a letter. Have the children circle that letter on their papers. Continue with other letters.
4. Name letters (individually)
Divide children into pairs. One child holds up a letter and asks the other one: "What is this letter?" The children take turns doing this the various letters.
5. Write letters from dictation
Divide children into pairs. One child names a letter and the other child writes the letter. They take turns in going through the letters in this manner.

APPENDIX F

TESTS ADMINISTERED BY INCENTIVE SCHEDULE

NAME _____

NAME OF SCHOOL _____

	2.	3.	4.
	6.	7.	8.
	10.	11.	12.
	14.	15.	16.
	18.	19.	20.
	22.	23.	24.
	26.		

LETTER NAMES TEST -- CAPITALS

Name _____

1.	R	D	O	N
2.	X	W	H	K
3.	T	A	M	F
4.	J	Y	B	S
5.	T	U	F	L
6.	C	I	Q	J
7.	R	L	P	E
8.	K	B	R	G
9.	V	I	U	X
10.	S	Z	B	Y
11.	N	P	A	F
12.	N	V	W	H
13.	E	O	F	C

14.	E	M	Y	K
15.	G	H	D	Z
16.	D	S	R	W
17.	W	C	M	T
18.	U	K	V	P
19.	N	Z	W	L
20.	J	G	S	O
21.	B	Y	T	X
22.	A	I	W	N
23.	K	G	S	U
24.	R	B	Q	C
25.	X	U	D	J
26.	V	N	Q	L

LETTER INDEX TEST - LOWER-CASE

Name _____

1.	h	v	o	m
2.	y	x	j	t
3.	s	w	p	a
4.	l	r	n	c
5.	u	i	s	b
6.	n	x	p	f
7.	t	i	o	n
8.	m	g	u	h
9.	z	k	v	r
10.	l	u	z	y
11.	a	m	s	e
12.	v	g	d	w
13.	n	i	r	d

14.	g	j	e	b
15.	y	x	v	a
16.	t	k	f	o
17.	l	n	g	h
18.	e	a	f	s
19.	h	r	b	m
20.	w	h	v	y
21.	c	y	m	u
22.	b	f	i	s
23.	o	s	j	d
24.	i	t	l	k
25.	m	g	a	p
26.	q	o	h	j

APPENDIX G

POST-PARENT QUESTIONNAIRE

QUESTIONNAIRE

"Effect of Incentives"

Introduction

This questionnaire has been prepared to determine the effectiveness of the incentives program that has been conducted for the past six months at your child's school. We would greatly appreciate it if you would answer these questions and make appropriate comments since the success of this program and future plans for similar programs depend heavily on your reaction to these type of questions.

Directions: Please place an X in the box above your choice for each question. Select only one answer for each question.

- 1) Did you feel that the training session by the psychologist was helpful in aiding your understanding of early childhood problems and the importance of communication?

Very Much Quite a Bit Some A Little Not at All IOC

- 2) To what extent did the training in Health and Diet Practices help you and answer your questions?

Great Extent Quite a Bit Some A Little Not at All IOC

- 3) Did you think the reading-skills games were helpful to your child in gaining the necessary pre-reading skills?

Def. Yes Qual. Yes Undecided Qual. No Def. No IOC

- 4) Did the training and work with the pre-reading games help you to better understand the skills necessary in preparation for reading?

Very Much Quite a Bit Some A Little Not at All IOC

5) Did working in your child's classroom give you a better understanding of classroom and school procedures?

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6) After participating in classroom procedures with the teacher present, do you feel more comfortable with the classroom teacher and with teachers generally?

Def. Yes Qual. Yes Undecided Qual. No Def. No IOC

7) To what extent did the pre-reading games and methods you learned during the program "carry-over" into the home?

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8) Did you think that the use of bi-lingual aides was helpful in enhancing the effectiveness of the program?

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9) Would you attend a similar type of program if it were offered again?

Def. Yes Qual. Yes Undecided Qual. No Def. No IOC

10) Do you feel this type of program should be repeated and expanded to include more parents over a greater length of time?

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11) To what degree did you feel the program helped your child in school as compared to the gain he would have made without the program?

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12) Philosophically, do you favor the use of incentives for children?

Def. Yes Qual. Yes Undecided Qual. No Def. No IOC

13) Philosophically, do you favor the use of incentives for parents?

Def. Yes Qual. Yes Undecided Qual. No Def. No IOC

14) Did you feel the incentives used were effective in helping you attend regularly?

Very Much Quite a Bit Some A Little Not at All IOC

15) Do you feel the incentives used were effective in helping your child in school?

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16) To what extent do you use the incentive idea with your children at home?

Great Extent Quite a Bit Some A Little Not at All IOC

17) Would you like to be involved in a program of this type that followed your child's progress throughout the primary grades?

Def. Yes Qual. Yes Undecided Qual. No Def. No IOC

18) In retrospect, did you feel that the meeting place for parent training (at the school) was appropriate?

Def. Yes Qual. Yes Undecided Qual. No Def. No IOC

19) Did the time and days of meetings meet with your approval?

Def. Yes / Qual. Yes Undecided Qual. No Def. No IOC

20) To what extent was transportation a problem?

Great Extent Quite a Bit Some A Little Not at All IOC

21) Please make any comments you would like under the following categories:

a. Strengths of the Program:

b. Weaknesses of the Program:

c. Recommendations for Improvement:

PARENT POST - QUESTIONNAIRE

"Effect of Incentives"

Introduction

This questionnaire has been prepared to determine the effectiveness of the incentives program that has been conducted for the past six months at your child's school. We would greatly appreciate it if you would answer these questions and make appropriate comments since the success of this program and future plans for similar programs depend heavily on your reaction to these type of questions.

Directions: Please place an X in the box above your choice for each question. Select only one answer for each question.

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TARRANT PUBLIC SCHOOLS - QUESTIONNAIRE

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